Modules offered in summer term

Biological and Neuroscientific Psychology

Biological Psychology II (Bachelor, 2. Semester, Module I)

Course format: Lecture

ECTS: 4

Language: German

Requirements: German or English level C1 recommended

Exam: English oral exam possible

Content: Research methods including structural and functional neuroanatomy (computer, magnetic resonance, functional magnetic resonance, and positron emission tomography, electroencephalography; evoked potentials; magnetoencephalography). Experimental and clinical approaches

Material: Comparable English textbooks available

Contact: Prof. Dr. Bellebaum; christian.bellebaum@hhu.de

Neuroscientific Psychology II (Bachelor, 4. Semester, Module O)

Course format: Lecture

ECTS: 4

Language: German

Requirements: German or English level C1 recommended; Basic knowledge of the central nervous system and brain behavior relationships (senses, motor actions etc.)

Exam: English oral exam possible

Content: Overview on cognitive neuroscience topics: neural correlates of perception, attention, memory etc.

Material: Comparable English textbooks available

Contact: Prof. Dr. Bellebaum; christian.bellebaum@hhu.de

Neuroscientific Psychology I (Master, 2. Semester, Module G)

Course format: Seminar

ECTS: 4

Language: German, English

Requirements: Only for Master students

Exam: Written exam (English oral exam possible)

Content: Current results in the field of cognitive neuroscience, architecture and neuronal bases of conscious and unconscious processes in human and non-human animals, research methods in Comparative Psychology, quantitative and qualitative approaches to experiential and behavioral research including measurement and manipulation of brain activity

Contact: Prof. Dr. Kalenscher; office.comparative@hhu.de

Advanced Neuropsychology II (Bachelor, 6. Semester, Module R)

Course format: Practical course

ECTS: 4

Language: German, English (depending on teacher availability)

Requirements: Only for Bachelor students

Exam: Work sample and/or written and/or oral exam (during summer term; English possible)

Content: Research methods in humans and animals: brain stimulation, functional neuroimaging, evoked potentials, biofeedback, pupillometry, neuropsychological testing, behavioral neuroscience in rodents.

Contact: Prof. Dr. Kalenscher/ Maurice Zech; maurice-philipp.zech@hhu.de

Differential Psychology and Psychological Testing

Differential and Personality Psychology II (Bachelor, 2. Semester, Module K)

Course format: Lecture

ECTS: 4

Language: German

Requirements: German or English level C1 recommended

Exam: English oral exam

Content: History, foundations, and paradigms of personality psychology; individual differences; traits vs. states; data collection methods; factor analysis; cluster analysis; the Big Five; intelligence; nature vs. nurture

Material: English textbook available

Contact: Prof. Dr. Musch; jochen.musch@hhu.de

Introduction to Psychological Assessment I (Bachelor, 2. Semester, Module E)

Course format: Lecture

ECTS: 4

Language: German

Requirements: German or English level C1

Exam: English oral exam

Content: Goals and foundations of psychological measurement; methods of psychological testing and assessment; objectivity; reliability; validity; Cohen's Kappa; Cronbach's alpha; moderator and suppressor variables; classical test theory; item response theory (Rasch, Birnbaum); scale levels; speed vs. power tests

Material: English textbook available

Contact: Prof. Dr. Musch; jochen.musch@hhu.de

Developmental Psychology

Developmental Psychology (Bachelor, 4. Semester, Module J)

Course format: Lecture

ECTS: 8

Language: German

Requirements: None

Exam: English oral exam, German written exam possible

Content: Theories and concepts; methods in developmental psychology; development in childhood, adolescence, and adulthood; development of specific functions (motor behavior; memory, perception; emotion; language; cognition; etc.); biological bases of development; studies with animals; pathological development; current research topics

Material: English textbook available

Contact: Prof. Dr. Bayen; sekretariat-bayen@hhu.de

Clinical Psychology

Introduction to Clinical Psychology (Bachelor, 4. Semester, Module N)

Course format: Lecture

ECTS: 8

Language: German

Requirements: None

Exam: English oral exam, German written exam possible

Content: History of Clinical Psychology; common paradigms and approaches in Clinical Psychology; epidemiology; etialogical and pathogenetic factors and models for psychological disorders; diagnosis and treatment of psychological disorders; basic principles of psychotherapy with a focus on cognitive-behavioral methods

Material: Comparable English textbooks available

Contact: Prof. Dr. Becker; sbecker@hhu.de

Abnormal Psychology I (Master, 2. Semester, Module F)

Course format: Seminar

ECTS: 4

Language: German

Requirements: None

Exam: Graded report or presentation (English possible)

Content: In-depth insights in to specific topics and problems in clinical psychology and psychotherapy; topics vary each year depending on the lecturers

Material: Comparable English textbooks available

Contact: Prof. Dr. Becker; sbecker@hhu.de

Cognitive Psychology

Experimental Psychology I: Perception and Thinking (Bachelor, 2. Semester, Module G)

Course format: Lecture

ECTS: 8

Language: German

Requirements: None

Exam: English oral exam

Content: Perception and Thinking: Visual perception (physiology; psychophysics; spatial frequency and contrast; object perception; color perception; perception of space and distance; movement perception; attention; scene perception); auditory perception (physiology; psychophysics; sound source location; perception of complex sounds; auditory scene perception); perception of music; perception of speech; somatosensory perception; olfactory perception; gustatory perception. Problem solving; expertise; creativity; hypothesis testing; judgement; decision-making; inductive and deductive reasoning; human rationality

Material: English textbook available

Contact: Prof. Dr. Buchner; axel.buchner@hhu.de

Applied Cognitive Psychology I (Master, 2. Semester, Module E)

Course format: Seminar

ECTS: 4

Language: German

Requirements: None

Exam: Written report (English possible)

Content: Critical discussion of research findings concerning perception, attention, learning, memory, and decision-making. Application of these findings/theories in eyewitness memory and advertisement principles

Material: English original literature available

Contact: Prof. Dr. Bell; raoul.bell@hhu.de

Statistics and Research Methods

Quantitative Methods II (Bachelor, 2. Semester, Module B2)

Course format: Lecture

ECTS: 6

Language: German

Requirements: Descriptive statistics, probabilities, binomial distribution, confidence intervals, one-sample hypotheses tests

Exam: English oral exam, German written exam possible

Content: Independent and dependent-samples t tests; statistical power; analysis of variance (one-factorial; multi-factorial; repeated-measures ANOVA); correlation; simple linear regression; non-parametric tests

Material: English textbook available

Contact: Prof. Dr. Bayen/Dr. Schaper; marie.schaper@hhu.de

Quantitative Methods and Evaluation: Computerized Analysis (Master, 2. Semester, Module A)

Course format: Seminar

ECTS: 4

Language: German

Requirements: Descriptive statistics, probabilities, binomial distribution, confidence intervals, one-sample and two-sample hypotheses tests, correlation, simple regression, two-way ANOVA with and without repeated measurement, experimental design, computer-assisted data analysis (t tests, two-way ANOVA)

Exam: Work sample (English possible)

Content: Implementation of computer-assisted data analysis using different software packages: multivariate methods, parameter estimation, model fit

Material: English textbook available

Contact: Prof. Dr. Bayen/Dr. Schaper; marie.schaper@hhu.de

Quantitative Methods and Evaluation II (Master, 2. Semester, Module A)

Course format: Lecture

ECTS: 4

Language: German

Requirements: Descriptive statistics, probabilities, binomial distribution, confidence intervals, one-sample and two-sample hypotheses tests, correlation, simple regression, two-way ANOVA with and without repeated measurement, experimental design

Exam: English oral exam only about this part

Content: Program evaluation (assessing the need for a program, program theory, measuring program outcomes, assessing program impact, social context of evaluation)

Material: English textbook available

Contact: Prof. Dr. Bayen; sekretariat-bayen@hhu.de

Practical Course in Experimental Research II (Bachelor, 4. Semester, Module D)

Course format: Practical Course

ECTS: 3

Language: German, English (depending on teacher availability)

Requirements: advanced statistics, i.e., correlation, simple regression, two-sample hypotheses tests, two-way ANOVA with and without repeated measurement, in some courses also non-parametric statistics. Experimental design. Computer-assisted data analyses

Exam: Graded report (English possible)

Content: Planning, conducting, analyzing, and reporting psychological experiments

Material: English class available

Contact: Prof. Dr. Zimmermann/ Sandra Tyralla; eckart.zimmermann@hhu.de

Research Methods (Bachelor, 2. Semester, Module C)

Course format: Seminar

ECTS: 3

Language: German

Requirements: German level C1

Exam: German written or oral exam

Content: Seminar in research methods: Literature search; generating and testing hypotheses; experimental design; data collection; overview of data analytical techniques; research ethics; evaluation of empirical research; ways to present empirical research

Contact: Prof. Dr. Jocham; gerhard.jocham@hhu.de

Participation in Research (Master, 4. Semester, Module C)

Course format: Project Module

ECTS: 11

Language: German or English (depending on research group)

Requirements: Only for Master students; Knowledge in data analysis, research design, the topic of the report

Exam: Attendance (flexible time)

Contact: All research groups

Bachelor Thesis

Course format: Report

ECTS: 2

Language: German or English (depending on research group)

Requirements: Only for Bachelor students; Knowledge in data analysis, research design, the topic of the report

Exam: Graded report (flexible time; English possible)

Contact: All research groups

Master Thesis

Course format: Report

ECTS: 30

Language: German or English (depending on research group)

Requirements: Only for Master students; Knowledge in data analysis, research design, the topic of the report

Exam: Graded report (flexible time; English possible)

Contact: All research groups