

## **Module handbook**

### **M.Sc. Psychology in Sport and Exercise [M.Sc. PSE]**

**Valid for first-year students: Winterterm 2016/17 onward**



**Deutsche  
Sporthochschule Köln**  
German Sport University Cologne

## Competences

The Master of Science “Psychology of Sport and Exercise” is a research oriented consecutive course of studies. It aims to integrate research topics of psychology and sport science such that a perspective emerges related to movement, health, organization and relevant aspects of neuro- and social science. During their studies students acquire academic knowledge and competences to represent, scientifically explore and to transfer these aspect to the applied field.

With respect to **scientific competences** they acquire and deepen the ability to process research questions from a broad range of sport psychological basic research (e.g. the role of motivation, emotion and cognition in sports). In addition they acquire a broad spectrum of research methods related to data analysis and study conduction. Thereby they take advantage of the national and international networks of the participating institutes, specifically of the Institute of Psychology. Overall, the graduates are being qualified for activities and occupation ins sport psychology, sport science, as well as in psychology.

With respect to **competences in the applied field** the students acquire and deepen the ability to develop, conduct and evaluate sport psychological consulting, diagnostics and intervention on a solid scientific ground. This is being support by the acquisition of organizational competences, e.g. the ability to develop networks, conduct educative workshops. Thus, here knowledge related competences will go in hand with concrete competence related to occupational actions.

Generally, the students will extend their *general, i.e. translational competences* going beyond their professional profile. By this and the unique curriculum of the PSE students will be able to apply their knowledge to other fields and solve complex problems in an innovative way.

Going beyond this, students learn basic strategies of *scientific problem solving*. This will allow them to make competent decisions in situations with restricted access to information. Further, they will be able to acquire knowledge and competences in new fields. This will be achieved by interdisciplinary work groups where they test project and self management. Additionally, the studies support and sharpen the *attitude towards life long learning* in academic occupation. Also, students will be supported to be able to fulfill social, ethical and moral aspects.

*Competences related to communication and emotions* are becoming increasingly important for work success. Thus, learning and acting in teams is an essential aspect during studying PSE, as well as presenting research topics. Thereby, different target groups will be addressed ranging from the scientific community to the applied field, as well as laypeople. Graduates should be able to present, discuss and communicate sovereignly with respect to the demands of these target groups.

Other aspects like *the development of personality or social competences* will be taken into account as well by providing an academic framework that allows the graduates to develop themselves to sensible, interested and critical individuals. Especially intercultural exchange is a challenge that provides the opportunity for experience and to learn critical reflection. The communication competences will be extended by integrating different teaching strategies (e.g. tutor system in PSE 1 and project work in PSE10, team work in PSE4).

**Module:** Introduction in Psychology, Sport and Exercise  
**Degree program:** M.Sc. Psychology in Sport and Exercise [M.Sc. PSE]  
**Valid for first-year students:** Winter term 2016/17 onward

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| German module title  | Einführung in psychology, sport and exercise  |
| Abbreviation   | PSE1  |
| Subject related semester / Duration  | 1. SRS / 1  |
| Total Workload/ Total ECTS points  | 150 h / 5   |
| Courses of the module<br>Title<br>Semester hours per week / Contact time / Self-study / Semester of study / Type of class / Language of instruction / Mandatory attendance | <p>a) Revision course on sport science, psychology and research methods<br/>1 SHW / 15 h / 40 h / 1. SRS / LEC / English / no</p> <p>b) Revision course on sport science, psychology and research methods<br/>1 SHW / 15 h / 40 h / 1. SRS / TUT / English / yes</p> <p>c) Nobel laureates of sport and psychology<br/>1 SHW / 15 h / 25 h / 1. SRS / SE / English / no</p>   |
| Key competencies   | <ul style="list-style-type: none"> <li>To align knowledge from BA-sport and BA-psychology backgrounds</li> <li>To learn to teach own knowledge to others</li> <li>To understand the added value of research and transfer of knowledge</li> <li>To prepare for modules PSE2-PSE11</li> </ul>   |
| Central contents   | <p>a) Revision course on sport science, psychology and research methods:</p> <ul style="list-style-type: none"> <li>Re-Activate and teach knowledge and add new knowledge from sport science, including motor learning, control, biomechanics, central and peripheral system, methods used in sports</li> </ul> <p>b) Revision course on sport science, psychology and research methods:</p> <ul style="list-style-type: none"> <li>Re-Activate and teach knowledge and add new knowledge from psychology including biopsychology, developmental, social, cognitive psychology, methods used in psychology</li> </ul> <p>c) Nobel laureates of sport and psychology:</p> <ul style="list-style-type: none"> <li>Search for persons and areas of research and transfer of knowledge in the area the students BA was not based on</li> <li>Understand the evaluation of performance in sport and psychology</li> <li>Present a laudatio as a group for a person you think deserves a Nobel laureate for his/her added value to the field</li> </ul> |
| Teaching and Learning Methods  | Revision, laudatio, learning through teaching. Former BA-psychology students will provide teaching for former BA-sport students and vice versa  |

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| Recommended Literature                          | Specific literature recommendations are given in the respective courses by the lecturer during the course of the semester   |
| Type of module (compulsory/elective)            | Compulsory  |
| Prerequisites                                   | Cf. <a href="#">Overview Prerequisites</a>  |
| Intermediate Assessments                        | For “Nobel laureates of sport and psychology”: presented laudatio   |
| Assessment / extent / share of the module grade | Written exam ungraded (mean of “Revision course on sport science, psychology and research methods” and “Revision course on sport science, psychology and research methods”) / 100 % |
| Module Commissioner                             | Cf. <a href="#">Overview Module Commissioner</a>  |

*Subject to modifications*

**Module:**

**Research Methods: Advanced Studies**

**Degree program:**

**M.Sc. Psychology in Sport and Exercise [M.Sc. PSE]**

**Valid for first-year students:**

**Winter term 2016/17 onward**

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| German module title  | Forschungsmethoden für Fortgeschrittene   |
| Abbreviation   | PSE2  |
| Subject related semester / Duration  | 1. & 2. SRS / 2   |
| Total Workload/ Total ECTS points  | 360 h / 12  |
| Courses of the module<br>Title<br>Semester hours per week / Contact time / Self-study / Semester of study / Type of class / Language of instruction / Mandatory attendance | a) Statistics Lectures Series<br>1 SHW / 15 h / 30 h / 1 / LEC / English / no<br>b) Tutorial Software aided application of advanced statistics<br>2 SHW / 30 h / 105 h / 1 / TUT / English / yes<br>c) Measurement and research design<br>2 SHW / 30 h / 60 h / 2 / SE / English / no<br>d) Tutorial Software aided study conduction<br>1 SHW / 15 h / 75 h / 2 / TUT / English / yes   |
| Key competencies   | <ul style="list-style-type: none"> <li>The students deepen their knowledge with respect to inferential statistics and acquire the knowledge and skills to apply complex quantitative research methods that are relevant in empirical research.</li> <li>The content of teaching is related to the mathematical and statistical basics of multivariate methods, as well as their computer-based application.</li> <li>Further, the students will learn to develop and apply models and methods of study and research design.</li> <li>At the end of the module the students will be able to plan, conduct, analyze and interpret complex research designs in basic and applied research.</li> </ul>  |
| Central contents   | a) Statistics Lectures Series Multivariate data handling and statistics: <ul style="list-style-type: none"> <li>Advanced inference statistics</li> <li>Structural equation models</li> </ul> b) Tutorial Software aided application of advanced statistics: <ul style="list-style-type: none"> <li>Computer aided application of the statistical models learned in the lecture</li> </ul> c) Measurement and research design: <ul style="list-style-type: none"> <li>Developing research questions and deriving research designs</li> <li>Planning and conducting studies</li> <li>Meta-analysis</li> <li>Statistical significance vs. practical relevance (i.e. statistical power)</li> <li>Qualitative approaches</li> </ul> d) Tutorial Software aided study conduction: |

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|   | <ul style="list-style-type: none"> <li>• Introduction to scientific programming</li> <li>• Software aided research design and study conduction</li> <li>• Introduction to online and offline questionnaire design</li> <li>• Introduction to a programming language for conducting experiments</li> </ul> |
| Teaching and Learning Methods                   | Teacher-centered teaching, computer aided tutorials, presentations, group work, self-experience, interactive demos  |
| Recommended Literature                          | Specific literature recommendations are given in the respective courses by the lecturer during the course of the semester   |
| Type of module (compulsory/elective)            | Compulsory  |
| Prerequisites                                   | Cf. <a href="#">Overview Prerequisites</a>  |
| Intermediate Assessments                        | None  |
| Assessment / extent / share of the module grade | Written exam (with shares of multiple choice)<br>Presentation / Lecture exam 60%<br>Graded seminar paper presentation 40%   |
| Module Commissioner                             | Cf. <a href="#">Overview Module Commissioner</a>  |

*Subject to modifications*

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|---------------------------------------|---|
| <b>Module:</b>                        | <b>Diagnostics, Intervention and Evaluation</b>           |
| <b>Degree program:</b>                | <b>M.Sc. Psychology in Sport and Exercise [M.Sc. PSE]</b> |
| <b>Valid for first-year students:</b> | <b>Winter term 2016/17 onward</b>                         |

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| German module title  | Diagnostik, Intervention und Evaluation  |
| Abbreviation   | PSE3   |
| Subject related semester / Duration  | 1. & 2. SRS / 2  |
| Total Workload/ Total ECTS points  | 360 h / 12   |
| Courses of the module<br>Title<br>Semester hours per week / Contact time / Self-study / Semester of study / Type of class / Language of instruction / Mandatory attendance | <p>a) Diagnostics, intervention and evaluation<br/>3 SHW / 45 h / 45 h / 1 / LEC / English / no</p> <p>b) Diagnostics, intervention and evaluation in experimental settings<br/>1 SHW / 15 h / 75 h / 1 / TUT / English / yes</p> <p>c) Diagnostics, intervention and evaluation in field studies<br/>1 SHW / 15 h / 75 h / 1 / TUT / English / yes</p> <p>d) Diagnostics, intervention and evaluation in applied settings<br/>1 SHW / 15 h / 75 h / 2 / TUT / English / yes</p>   |
| Key competencies   | <ul style="list-style-type: none"> <li>• Knowledge on principles and methods in diagnostics and evaluation</li> <li>• Experience of principles and methods in different settings of psychology of sport and exercise</li> <li>• Exemplary development and realisation of diagnostic and/or evaluation in different settings of psychology of sport and exercise</li> </ul>   |
| Central contents   | <p>a) Diagnostics, intervention and evaluation:</p> <p>I. Intervention</p> <ul style="list-style-type: none"> <li>• Theory based modeling of intervention/treatments</li> <li>• Nature/structure of psychological intervention/treatments</li> <li>• Individual vs. group treatments</li> <li>• Effect bias (environment, situation, persons)</li> <li>• Treatments in research</li> <li>• Treatments in applied sport psychology</li> </ul> <p>II. Diagnostics</p> <ul style="list-style-type: none"> <li>• systematic of psychological objects of diagnostic</li> <li>• diagnostical approaches in sport psychology</li> <li>• quality criteria</li> <li>• questionnaire</li> <li>• interview</li> <li>• observation/behavior measurement</li> <li>• psycho-physiological measurement</li> <li>• Multi-method/ mixed methods</li> <li>• Assessment Center</li> <li>• psychological opinion (expert report)</li> <li>• ethical concerns of counselling processes</li> </ul> |

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|   | <p>III. Evaluation</p> <ul style="list-style-type: none"> <li>• process of evaluation (overview)</li> <li>• evidence levels</li> <li>• evaluation of counselling processes</li> </ul> <p>b) Diagnostics, intervention and evaluation in experimental settings:</p> <ul style="list-style-type: none"> <li>• Diagnostics, intervention and evaluation in experimental settings</li> </ul> <p>c) Diagnostics, intervention and evaluation in field studies:</p> <ul style="list-style-type: none"> <li>• Diagnostics, intervention and evaluation in field studies</li> </ul> <p>d) Diagnostics, intervention and evaluation in applied settings:</p> <ul style="list-style-type: none"> <li>• Diagnostics, intervention and evaluation in applied settings like sport psychological counseling and working with athletes/teams considering lecture content</li> </ul> |
| Teaching and Learning Methods                   | Teacher-centered teaching, group work, self-experience, interactive demos  |
| Recommended Literature                          | Specific literature recommendations are given in the respective courses by the lecturer during the course of the semester  |
| Type of module (compulsory/elective)            | Compulsory   |
| Prerequisites                                   | Cf. <a href="#">Overview Prerequisites</a>   |
| Intermediate Assessments                        | None   |
| Assessment / extent / share of the module grade | Written exam (with shares of multiple choice) / 100 %  |
| Module Commissioner                             | Cf. <a href="#">Overview Module Commissioner</a>   |

*Subject to modifications*



**Module:**

**Mind, Motion and Performance**

**Degree program:**

**M.Sc. Psychology in Sport and Exercise [M.Sc. PSE]**

**Valid for first-year students:**

**Winter term 2016/17 onward**

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| German module title  | Kognition, Bewegung und Leistung   |
| Abbreviation   | PSE4   |
| Subject related semester / Duration  | 1. & 2. SRS / 2  |
| Total Workload/ Total ECTS points  | 270 h / 9  |
| Courses of the module<br>Title<br>Semester hours per week / Contact time / Self-study / Semester of study / Type of class / Language of instruction / Mandatory attendance | <p>a) Mind, motion and performance/Interaction of action, cognition and perception<br/>2 SHW/ 30 h / 60 h / 1 / LEC / English / no</p> <p>b) Research in mind, motion and performance<br/>2 SHW/ 30 h / 60 h / 1 / SE / English / no</p> <p>c) Diagnostics and interventions in mind and motion in sports<br/>2 SHW / 30 h / 60 h / 2 / TUT / English / yes</p>  |
| Key competencies   | <ul style="list-style-type: none"> <li>• To understand the interaction of action and perception</li> <li>• Understanding, reflecting, discussing theories and models (lecture)</li> <li>• Research designs, empirically testing the interaction (behavioral, neuroscientific) (seminar)</li> <li>• Diagnostics and interventions (practice and exercise)</li> </ul>  |
| Central contents   | <p>a) Mind, motion and performance/Interaction of action, cognition and perception:</p> <ul style="list-style-type: none"> <li>• Embodiment enactivity of cognition</li> <li>• embodied perception, embodied cognition,</li> <li>• information processing,</li> <li>• cognitive functioning (cognition)</li> </ul> <p>b) Research in mind, motion and performance</p> <ul style="list-style-type: none"> <li>• Mind, motion and performance/ embodiment perspective in sport settings</li> <li>• Related to addresses/ coachees like athletes, players, coaches, referees, parents etc.</li> <li>• perception – action</li> <li>• perceptual processing</li> <li>• problem solving</li> <li>• decision making in sports</li> </ul> <p>c) Diagnostics and interventions in mind and motion in sports:</p> <ul style="list-style-type: none"> <li>• applying diagnostics, and intervention</li> <li>• information processing of athletes and coaches and referees</li> <li>• decision making</li> <li>• mental training techniques and interventions (e.g. focus of attention, self instruction, self talk)</li> <li>• coaching</li> </ul> |

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| Teaching and Learning Methods                   | Group work, presentations, independent learning, blended learning, problem based learning, self studies                   |
| Recommended Literature                          | Specific literature recommendations are given in the respective courses by the lecturer during the course of the semester |
| Type of module (compulsory/elective)            | Compulsory  |
| Prerequisites                                   | Cf. <a href="#">Overview Prerequisites</a>  |
| Intermediate Assessments                        | None  |
| Assessment / extent / share of the module grade | Written exam (with shares of multiple choice)<br>Coursework essay / Written exam 60 %<br>Documentation 40 %               |
| Module Commissioner                             | Cf. <a href="#">Overview Module Commissioner</a>  |

*Subject to modifications*

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|---------------------------------------|---|
| <b>Module:</b>                        | <b>Motivation, Emotion and Adherence</b>                  |
| <b>Degree program:</b>                | <b>M.Sc. Psychology in Sport and Exercise [M.Sc. PSE]</b> |
| <b>Valid for first-year students:</b> | <b>Winter term 2016/17 onward</b>                         |

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| German module title  | Motivation, Emotion und Adhärenz  |
| Abbreviation   | PSE5  |
| Subject related semester / Duration  | 1. & 2. SRS / 2   |
| Total Workload/ Total ECTS points  | 270 h / 9   |
| Courses of the module<br>Title<br>Semester hours per week / Contact time / Self-study / Semester of study / Type of class / Language of instruction / Mandatory attendance | <p>a) Phenomena, theories and fields of application<br/>2 SHW / 30 h / 60 h / 1 / LEC / English / no</p> <p>b) Diagnostics and enhancement of motivation and emotion<br/>2 SHW / 30 h / 60 h / 2 / SE / English / no</p> <p>c) Change processes in motivation and emotion<br/>2 SHW / 30 h / 60 h / 2 / TUT / English / yes</p>   |
| Key competencies   | <ul style="list-style-type: none"> <li>to obtain in-depth theoretical insight in motivational and emotional theories, structures and mechanisms</li> <li>to acquire competencies for planning theory based interventions (individual and group setting) on fostering motivation, adherence and emotional components (e.g. mood) in research and application</li> <li>to grasp similarities and differences between interventions in research and application</li> <li>to conduct and reflect aforesaid interventions in application (e.g. to understand and experience supervisions and interventions)</li> <li>to integrate specific diagnostic inside aforesaid interventions</li> <li>to report aforesaid interventions</li> </ul>   |
| Central contents   | <p>a) Phenomena, theories and fields of application:</p> <ul style="list-style-type: none"> <li>Motivational phenomena: intention-behavior-gap, dropout/adherence, flow social facilitation, social loafing, social contagion, social compensation</li> <li>Theories of motivation and volition – predictors, processes and outcome variables (e.g. Self-Determination Theory, Health-Belief-Model, Theory of planned behavior, social-cognitive theory)</li> <li>Motivation and emotion</li> <li>Motivation as a state or trait variable</li> <li>Studies on motivation in different settings and indications across the life span</li> </ul> <p>b) Diagnostics and enhancement of motivation and emotion:</p> <ul style="list-style-type: none"> <li>Diagnostics of motivational and emotional states (e.g., questionnaires) in research and application</li> <li>Interventions of motivational and emotional states</li> </ul> |

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|   | <p>(e.g. motivational interviewing, self talk, goal setting, autonomy support)</p> <ul style="list-style-type: none"> <li>• Evaluation of motivational and emotional states in research and application</li> </ul> <p>c) Change processes in motivation and emotion</p> <ul style="list-style-type: none"> <li>• Applying motivation-enhancing and emotion-regulating strategies on a single case</li> <li>• Supervision and intervention</li> </ul> |
| Teaching and Learning Methods                   | Teacher-centered teaching, presentations, group work   |
| Recommended Literature                          | Specific literature recommendations are given in the respective courses by the lecturer during the course of the semester  |
| Type of module (compulsory/elective)            | Compulsory   |
| Prerequisites                                   | Cf. <a href="#">Overview Prerequisites</a>   |
| Intermediate Assessments                        | Diagnostics and enhancement of motivation and emotion: small group presentation (incl. exemplary practice)   |
| Assessment / extent / share of the module grade | <p>Written exam (multiple choice)</p> <p>Documentation / Written exam 50%</p> <p>Documentation 50 %</p>  |
| Module Commissioner                             | Cf. <a href="#">Overview Module Commissioner</a>   |

*Subject to modifications*

**Module:**

**Relationships, Teams, and Group Dynamics**

**Degree program:**

**M.Sc. Psychology in Sport and Exercise [M.Sc. PSE]**

**Valid for first-year students:**

**Winter term 2016/17 onward**

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| German module title  | Sozialbeziehungen, Teams und Gruppendynamik  |
| Abbreviation   | PSE6   |
| Subject related semester / Duration  | 2. & 3. SRS / 2  |
| Total Workload/ Total ECTS points  | 270 h / 9  |
| Courses of the module<br>Title<br>Semester hours per week / Contact time / Self-study / Semester of study / Type of class / Language of instruction / Mandatory attendance | <p>a) Phenomena, theories and fields of application<br/>2 SHW / 30 h / 60 h / 2 / LEC / English / no</p> <p>b) Enhancing social relationships: Treatments, interventions and evaluation in research and applied settings (Part 1 – group oriented)<br/>2 SHW / 30 h / 60 h / 2 / SE / English / yes</p> <p>c) Enhancing social relationships: Treatments, interventions and evaluation in research and applied settings (Part 2 – coach &amp; parent oriented)<br/>2 SHW / 30 h / 60 h / 3 / SE / English / yes</p>  |
| Key competencies   | <ul style="list-style-type: none"> <li>• To obtain in-depth theoretical insight in social relationship theories, structures and mechanisms</li> <li>• To acquire competencies for planning, conducting and evaluating theory based interventions and treatments for groups and teams to improve e.g. relationship quality, well-being and ability to perform</li> <li>• To acquire competencies to be able to observe, describe, explain and optimize behaviour in teams as well as between athletes, coaches and parents</li> </ul>   |
| Central contents   | <p>a) Phenomena, theories and fields of application:</p> <ul style="list-style-type: none"> <li>• Theories of social relationships (e.g. social identity theory, balance theory, leadership theory, attachment theory, need theories, role theories etc.)</li> <li>• Structures of social relationships</li> <li>• Processes in social relationships</li> <li>• Outcomes of social relationships: social support, identification, social wellbeing, cohesion, motivational climate etc.</li> <li>• Research in sport and exercise psychology on social relationship theories</li> </ul> <p>b) Enhancing social relationships: Treatments, interventions and evaluation in research and applied settings (Part 1 – group oriented):</p> <ul style="list-style-type: none"> <li>• Developing treatments and interventions for groups and teams: e.g. group goal setting, group identification enhancement, team development, optimizing social support, communication, cohesion</li> </ul> |

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|   | <ul style="list-style-type: none"> <li>Evaluating treatments and interventions for groups and teams: e.g. group goal setting, group identification enhancement, teambuilding, optimizing social support</li> </ul> <p>c) Enhancing social relationships: Treatments, interventions and evaluation in research and applied settings (Part 2 – coach &amp; parent oriented):</p> <ul style="list-style-type: none"> <li>Developing treatments and interventions for coaches and parents: e.g. role clarification, optimizing leadership behaviour and communication, autonomy supportive behaviour</li> <li>Evaluating treatments and interventions for coaches and parents: e.g. role clarification, optimizing leadership behaviour and communication, autonomy supportive behaviour</li> </ul> |
| Teaching and Learning Methods                   | Teacher-centred teaching, presentations, group work, self-experience, block seminar, excursion  |
| Recommended Literature                          | Specific literature recommendations are given in the respective courses by the lecturer during the course of the semester   |
| Type of module (compulsory/elective)            | Compulsory  |
| Prerequisites                                   | Cf. <a href="#">Overview Prerequisites</a>  |
| Intermediate Assessments                        | None  |
| Assessment / extent / share of the module grade | Demonstration lesson<br>Oral exam / Demonstration lesson 50%<br>Oral exam 50%   |
| Module Commissioner                             | Cf. <a href="#">Overview Module Commissioner</a>  |

*Subject to modifications*

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|---------------------------------------|---|
| <b>Module:</b>                        | <b>Emotion, Cognition, and Performance</b>                |
| <b>Degree program:</b>                | <b>M.Sc. Psychology in Sport and Exercise [M.Sc. PSE]</b> |
| <b>Valid for first-year students:</b> | <b>Winter term 2016/17 onward</b>                         |

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| German module title  | Emotion, Kognition und Leistung  |
| Abbreviation   | PSE7   |
| Subject related semester / Duration  | 2. & 3. SRS / 2  |
| Total Workload/ Total ECTS points  | 270 h / 9  |
| Courses of the module<br>Title<br>Semester hours per week / Contact time / Self-study / Semester of study / Type of class / Language of instruction / Mandatory attendance | <p>a) Emotion, cognition, HRV, PTLID<br/>2 SHW / 30 h / 60 h / 2 / LEC / English / no</p> <p>b) Applied HRV: HRV measurement and interpretation<br/>2 SHW / 30 h / 60 h / 2 / TUT / English / yes</p> <p>c) Emotion/cognition at the brain level<br/>2 SHW / 30 h / 60 h / 3 / SE / English / no</p>   |
| Key competencies   | <ul style="list-style-type: none"> <li>• <b>Psychophysiology and cognition</b></li> <li>• Advanced Psychophysiology autonomous nervous system</li> <li>• To measure heart rate variability</li> <li>• To interpret heart rate variability</li> <li>• To assess cognitive performance on executive and non-executive tasks</li> <li>• To regulate emotions in order to improve cognition</li> <li>• To interpret the relationship between emotions and cognition in the brain</li> <li>• To measure emotions in the brain</li> <li>• <b>Personality-trait-like individual differences</b></li> <li>• Advanced Personality foundations</li> <li>• To measure personality-trait like individual differences</li> <li>• To interpret personality-trait like individual differences</li> <li>• <b>Interventions</b></li> <li>• Use heart rate variability to build interventions (e.g., slow paced breathing, biofeedback)</li> <li>• Use brain measures and prepare bio-feedback and neuro-feedback interventions</li> <li>• Use personality-trait like individual differences to build interventions</li> </ul> |
| Central contents   | <ul style="list-style-type: none"> <li>• <b>Influence of emotions and stress on cognition:</b> distinction between executive (e.g. decision-making, inhibition, working memory, cognitive flexibility) and non-executive functions (e.g. reaction time)</li> <li>• <b>Heart rate variability:</b> a physiological marker indexing emotion, stress and cognition</li> <li>• <b>Personality-trait-like individual differences:</b> how they influence the emotion-cognition relationship (e.g., emotional intelligence, intuition, reinvestment)</li> <li>• <b>Electroencephalography:</b> emotion-cognition relationship</li> </ul>   |

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|   | <p>at the brain level</p> <ul style="list-style-type: none"> <li>• <b>Interventions:</b> based on heart rate variability monitoring, brain measures, and personality-trait-like individual differences</li> </ul> |
| Teaching and Learning Methods                   | Group work, presentations, independent learning   |
| Recommended Literature                          | Specific literature recommendations are given in the respective courses by the lecturer during the course of the semester   |
| Type of module (compulsory/elective)            | Compulsory  |
| Prerequisites                                   | Cf. <a href="#">Overview Prerequisites</a>  |
| Intermediate Assessments                        | None  |
| Assessment / extent / share of the module grade | Oral exam concerning contents of the module incl. practical demonstration / 100 %   |
| Module Commissioner                             | Cf. <a href="#">Overview Module Commissioner</a>  |

*Subject to modifications*



|                                       |   |
|---------------------------------------|---|
| <b>Module:</b>                        | <b>Stress, Mental Health, and Wellbeing</b>               |
| <b>Degree program:</b>                | <b>M.Sc. Psychology in Sport and Exercise [M.Sc. PSE]</b> |
| <b>Valid for first-year students:</b> | <b>Winter term 2016/17 onward</b>                         |

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|--|---|
| German module title  | Stress, mentale Gesundheit und Wohlbefinden   |
| Abbreviation   | PSE8  |
| Subject related semester / Duration  | 3. SRS / 1  |
| Total Workload/ Total ECTS points  | 270 h / 9   |
| Courses of the module<br>Title<br>Semester hours per week / Contact time / Self-study / Semester of study / Type of class / Language of instruction / Mandatory attendance | <p>a) Stress, mental health and wellbeing in sport and exercise psychology<br/>2 SHW / 30 h / 60 h / 3 / LEC / English / no</p> <p>b) Diagnostics in stress, mental health and wellbeing<br/>2 SHW / 30 h / 60 h / 3 / SE / English / yes</p> <p>c) Coaching and counselling skills for stress management, improving mental health and wellbeing<br/>2 SHW / 30 h / 60 h / 3 / TUT / English / yes</p>  |
| Key competencies   | <ul style="list-style-type: none"> <li>To obtain in-depth theoretical insight in stress, mental health and wellbeing; structures and mechanisms</li> <li>To understand and conduct specific diagnostics for stress and mental health</li> <li>To identify characteristics of a well-functioning and a less well-functioning psychological states</li> <li>To prepare expertises</li> <li>To prepare treatments and interventions for individuals who want to increase or change their psychological skills</li> </ul>   |
| Central contents   | <p>a) Stress, mental health and wellbeing in sport and exercise psychology:</p> <ul style="list-style-type: none"> <li>Subclinical (e.g. stress, arousal, pain) and clinical aspects (e.g. anxiety, burnout, depression, addictive behavior)</li> <li>Physical activity as a cause (e.g. elite sport as a cause for burnout, injuries as a cause for injury anxiety, etc.)</li> <li>Physical activity as a treatment (e.g. physical activity programs as an intervention for burnout, physical activity programs as an intervention for enhancing self-confidence)</li> </ul> <p>b) Diagnostics in stress, mental health and wellbeing:</p> <ul style="list-style-type: none"> <li>Assessment and Classification Instruments (e.g. Classification System)</li> <li>Practicing data collection, data analysis and data interpretation</li> <li>Writing expertise</li> <li>Ethical aspects</li> </ul> <p>c) Coaching and counselling skills for stress management, improving mental health and wellbeing:</p> |

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|   | <ul style="list-style-type: none"> <li>• Developing treatments and interventions for athletes (i.e., performance enhancement, personality development, mental health), best practice initiatives</li> <li>• Developing physical activity programs aiming at stress management, personality development and improving mental health (e.g. mindfulness)</li> <li>• Coaching and counseling techniques</li> </ul> |
| Teaching and Learning Methods                   | Teacher-centered teaching, presentations, group work, self-experience  |
| Recommended Literature                          | Specific literature recommendations are given in the respective courses by the lecturer during the course of the semester  |
| Type of module (compulsory/elective)            | Compulsory   |
| Prerequisites                                   | Cf. <a href="#">Overview Prerequisites</a>   |
| Intermediate Assessments                        | None   |
| Assessment / extent / share of the module grade | Written exam (multiple choice)<br>Coursework essay / Written exam 50%<br>Coursework essay 50%  |
| Module Commissioner                             | Cf. <a href="#">Overview Module Commissioner</a>   |

*Subject to modifications*

**Module:** Perception, Cognition and Psychophysiology  
**Degree program:** M.Sc. Psychology in Sport and Exercise [M.Sc. PSE]  
**Valid for first-year students:** Winter term 2016/17 onward

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|--|---|
| German module title  | Wahrnehmung, Kognition und Psychophysiologie  |
| Abbreviation   | PSE9  |
| Subject related semester / Duration  | 3. SRS / 1  |
| Total Workload/ Total ECTS points  | 270 h / 9   |
| Courses of the module<br>Title<br>Semester hours per week / Contact time / Self-study / Semester of study / Type of class / Language of instruction / Mandatory attendance | <p>a) Core processes of perception and cognition<br/>2 SHW / 30 h / 60 h / 3 / LEC / English / no</p> <p>b) Psychophysiology of perception and cognition<br/>2 SHW / 30 h / 60 h / 3 / SE / English / no</p> <p>c) Applied psychophysiology<br/>2 SHW / 30 h / 60 h / 3 / TUT / English / yes</p>   |
| Key competencies   | <ul style="list-style-type: none"> <li>To obtain in-depth theoretical insight in cognitive neuroscience theories and mechanisms of perception and cognition</li> <li>To acquire competencies for planning and conducting theory based empirical and applied psychophysiological studies related to perception and cognition</li> </ul>  |
| Central contents   | <p>a) Core processes of perception and cognition:<br/><i>Methods of cognitive neuroscience and psychophysiology, e.g.</i></p> <ul style="list-style-type: none"> <li>• EEG</li> <li>• TMS</li> <li>• EMG</li> <li>• Eye tracking</li> </ul> <p><i>Neuroscientific, psychomotoric and psychological theories related to perception and cognition and their role in sports, e.g.:</i></p> <ul style="list-style-type: none"> <li>• Cognitive Control</li> <li>• Perceptual learning</li> <li>• Memory</li> <li>• Attention</li> <li>• Advances of perception</li> <li>• Advances of neuro- and psychophysiology</li> </ul> <p>b) Psychophysiology of perception and cognition:</p> <ul style="list-style-type: none"> <li>• Central and peripheral psychophysiology of perception and cognition</li> <li>• Methods of psychophysiology related to perception and cognition</li> <li>• Cognition and Perception in Sports</li> </ul> <p>c) Applied psychophysiology:</p> <ul style="list-style-type: none"> <li>• How to measure psychophysiological variables in a lab and in applied settings</li> <li>• Advanced signal processing</li> </ul> |

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|                                      | <ul style="list-style-type: none"> <li>• Advanced mobile psychophysiology</li> <li>• Behavioral data (errors, response times, kinematics)</li> <li>• Advanced knowledge of measurement theory, inference statistics and linear models</li> <li>• Advanced knowledge in electrical circuits and electrical measurement (e.g. conductivity and resistance)</li> </ul> |
| Teaching and Learning Methods        | Teacher-centered teaching, presentations, group work, self-experience, experiments, excursion   |
| Recommended Literature               | Specific literature recommendations are given in the respective courses by the lecturer during the course of the semester   |
| Type of module (compulsory/elective) | Compulsory  |
| Prerequisites                        | Cf. <a href="#">Overview Prerequisites</a>  |
| Intermediate Assessments             | None  |
| Assessment                           | Oral exam<br>Presentation   |
| Weight of module                     | Oral exam 60%<br>Presentation 40%   |
| Module Commissioner                  | Cf. <a href="#">Overview Module Commissioner</a>  |

*Subject to modifications*

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| <b>Module:</b>                        | <b>Scientific Project</b>                                 |
| <b>Degree program:</b>                | <b>M.Sc. Psychology in Sport and Exercise [M.Sc. PSE]</b> |
| <b>Valid for first-year students:</b> | <b>Winter term 2016/17 onward</b>                         |

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| German module title  | Wissenschaftliches Projekt  |
| Abbreviation   | PSE10   |
| Subject related semester / Duration  | 1.-3. SRS / 1   |
| Total Workload/ Total ECTS points  | 270h / 7  |
| Courses of the module<br>Title<br>Semester hours per week / Contact time / Self-study / Semester of study / Type of class / Language of instruction / Mandatory attendance | Preparing, realisation and evaluation of a scientific project, one from part 1 and one from part 2<br>a) Health and social psychology <ul style="list-style-type: none"> <li>Relationships, teams and group dynamics <b>or</b></li> <li>Motivation, emotion and adherence <b>or</b></li> <li>Stress, mental health and Wellbeing</li> </ul> 1 SHW / 15h / 75h / 3 or 4 / TUT / English / yes<br>b) Performance psychology <ul style="list-style-type: none"> <li>Mind, emotion and performance <b>or</b></li> <li>Mind, motion and performance <b>or</b></li> <li>Perception, cognition and psychophysiology</li> </ul> 1 SHW / 15h / 75h / 3 or 4 / TUT / English / yes<br>c) Experimenter experience and participation in studies<br>1 SHW / 15h / 15h / 1-3 participation in studies / TUT / English / yes |
| Key competencies   | <ul style="list-style-type: none"> <li>To review the state-of-the-art in a field and to draw consequences</li> <li>To learn to work methodologically, empirically, conceptually and systematically</li> <li>To obtain project management skills and team competences</li> <li>To acquire in-depth methodological competencies</li> <li>To obtain first insight to in-depth scientific working approaches</li> <li>To apply scientific methods and interpret data critically</li> </ul>  |
| Central contents   | <ul style="list-style-type: none"> <li>Principals of planning and realizing a research project</li> <li>Developing research questions, generating hypotheses, planning research designs</li> <li>Advanced literature review strategies, APA standards</li> <li>Applying research methods (selection, appliance, analysis)</li> <li>Analysing data</li> <li>Advanced Planning and writing a manuscript</li> </ul> <p>The contents should be elaborated both theoretically as well in terms of supervision of the respective project.</p>   |
| Teaching and Learning Methods  | Group work, presentations, (scientific) writing   |
| Recommended Literature   | Specific literature recommendations are given in the  |

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|   | respective courses by the lecturer during the course of the semester |
| Type of module (compulsory/elective)            | Compulsory   |
| Prerequisites                                   | Cf. <a href="#">Overview Prerequisites</a>                           |
| Intermediate Assessments                        | None   |
| Assessment / extent / share of the module grade | a) Project presentation / 50 %<br>b) Project presentation / 50%      |
| Module Commissioner                             | Cf. <a href="#">Overview Module Commissioner</a>                     |

*Subject to modifications*

# Module Description



Deutsche  
Sporthochschule Köln  
German Sport University Cologne

**Module:**

**Master Thesis**

**Degree program:**

**M.Sc. Psychology in Sport and Exercise [M.Sc. PSE]**

**Valid for first-year students:**

**Winter term 2016/17 onward**

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| German module title  | Masterarbeit   |
| Abbreviation   | PSE11  |
| Subject related semester / Duration  | 4. SRS / 1   |
| Total Workload/ Total ECTS points  | 900 h / 30   |
| Courses of the module<br>Title<br>Semester hours per week / Contact time / Self-study / Semester of study / Type of class / Language of instruction / Mandatory attendance | a) Colloquium<br>2 SHW / 30 h / 30 h / 4 / SE / English / yes  |
| Key competencies   | <ul style="list-style-type: none"> <li>• To obtain and evaluate information</li> <li>• To work methodologically, conceptually and systematically</li> <li>• To organize one's own work (time and project management, team respectively cooperative spirit)</li> <li>• To acquire in-depth methodological competencies</li> <li>• To obtain an in-depth scientific working approach</li> <li>• To attain and evaluate scientific data critically</li> </ul> |
| Central contents   | <ul style="list-style-type: none"> <li>• Project management</li> <li>• Develop a research problem</li> <li>• Evaluate a theoretical framework and conduct a literature review</li> <li>• Scientific writing</li> <li>• Develop a theoretical model (and hypotheses)</li> <li>• Apply adequate methodology to the research issue</li> <li>• Data management</li> <li>• Analysis and discussion of results</li> <li>• Conclusion</li> </ul>                  |
| Teaching and Learning Methods  |  |
| Recommended Literature   | Specific literature recommendations are given in the respective courses by the lecturer during the course of the semester  |
| Type of module (compulsory/elective)   | Compulsory   |
| Prerequisites  | Cf. <a href="#">Overview Prerequisites</a>   |
| Intermediate Assessments   | None   |
| Assessment / extent / share of the module grade  | Master Thesis / 100 %  |
| Module Commissioner  | Cf. <a href="#">Overview Module Commissioner</a>   |

*Subject to modifications*