

Title of Module (English):		Data Acquisition and Data Analysis					
Title of Module (German):		Datenerhebung und Datenanalyse					
Degree Programme:		Bachelor of Science "Human Movement in Sports and Exercise"					
1	Module Number: 10	Status: <input checked="" type="checkbox"/> Mandatory Module <input type="checkbox"/> Elective Module					
2	Frequency:	<input type="checkbox"/> Every semester <input checked="" type="checkbox"/> Every winter semester <input type="checkbox"/> Every summer semester	Duration:	<input type="checkbox"/> 1 semester <input checked="" type="checkbox"/> 2 semesters	Semester: 3-4	CP: 14	Workload (h): 420
3	Module Structure:						
	No.	Type	Course	Status (mandatory/ elective)	CP	Attendance (h + SWS¹⁹)	Individual Study Time (h)
	1	S	Ethical Issues in Research	<input checked="" type="checkbox"/> m <input type="checkbox"/> e	2	30 (2 SWS)	30
2	S	Seminars in Data Acquisition and Data Analysis (a total of 3 courses)	<input checked="" type="checkbox"/> m <input type="checkbox"/> e	12	90 (6 SWS)	270	
4	Content of Module: The objective of this module is to enable students to actually use and apply specific research methods in the field of sports and exercise. The students will be offered a wide range of courses to ensure their methodological breadth. Within the module, one course (Seminar 1, offered in the first semester of the module) conveys ethical standards of conducting research, ensuring that students understand that the application of research methods necessitates detailed knowledge of ethical issues in the field. Students freely choose three methods seminars (each of 4 CP) from the course offer. Seminars may include, but are not limited to "Experimental Stimulation", "Imaging Methods", "Kinematic Analysis", "Motor Testing", "Multivariate Statistics", "Mathematical Modelling", "Behavioural Data Acquisition", "Molecular Lab Techniques", "Neuroscience", or "Electrophysiology". Within these courses, students deepen their understanding of research by acquiring and analysing data from real research projects.						
5	Learning Outcomes: The students know and understand the ethical issues raised when performing research. They are also able to act according to the standard rules of ethical research. They are able to provide adequate information for study participants, to prepare informed consent, to use code lists appropriately, and know how to write an ethical grant application. Students also know and have in-depth knowledge on how to apply specific research methods, e.g. how to conduct and evaluate a three-dimensional movement analysis. They will be able to apply these research methods to relevant research questions.						
6	Options within the Module: Students freely choose three methods seminars from the course offer. The class "Ethical Issues in Research" is mandatory.						
7	Type of Examination: <input type="checkbox"/> Final Module Examination <input type="checkbox"/> Module Examination <input checked="" type="checkbox"/> Component Examinations						
8	Degree-Relevant Examination(s):						

¹⁹ SWS (Semesterwochenstunden) = hours of instruction per week

	Number and form (e.g. written examination, oral examination); assigned to course no. ²⁰ :	Duration or length	Weighting of grade for module grade in %
	Oral Examination in one seminar (pass/fail)	15 min	
	Poster in one seminar (pass/fail; different seminar from the one mentioned above for an oral examination)	DIN A0	
9	Required Coursework: Number and form; assigned to course no.:		Duration or length
	Short and extensive coursework is necessary for the preparation, realization, and post-processing of courses. Short and extensive coursework includes e.g. protocols (approx. 1–2 pages) and written/oral assignments (approx. 10 pages/10–15 minutes), respectively. The type of coursework will be announced at the beginning of the course. Duration and extent of coursework will be oriented towards the underlying workload.		
10	Requirements for Obtaining Credits (CP): The credit points of the module are awarded when the entire module, i.e. all degree-relevant examinations and all required coursework, has been completed successfully.		
11	Weighting of Module Grade in Calculation of Final Overall Grade: 0%		
12	Admission to Module: Successful completion of M1 and M2 is strongly recommended.		
13	Attendance: In all courses, 100% participation is recommended. In the seminar S1, 80% attendance is mandatory due to the particular importance of this seminar for research. In all other seminars, 80% attendance is also mandatory due to the fact that each stage in the acquisition of research methods builds upon the previous stage.		
14	This Module is also an Element of the Following Degree Programmes: --		
15	Module Coordinator: Prof. Dr. H. Wagner	Faculty: FB07	
16	Additional Information: All seminars are in English. All reading and writing assignments will be in English, as well as all exams and presentations.		

²⁰ Not applicable to final module examination