Number of Module	Name of Module	Lecturer
VW-ATL-74a	Human Behavior and Environmental Effects in Transportation	Prof. Jens Borken-Kleefeld verkehrsoekologie@tu-dresden.de
Qualification Aim	Students have a basic understanding of human experience and behavior, particularly in the context of transportation and mobility. They are familiar with relevant theories, methods, and intervention strategies in psychology and are able to apply them to issues in transportation planning and design. Students can quantitatively assess the environmental impacts of transportation. They are able to calculate fuel consumption, CO2 emissions, and air pollutant emissions for various modes of transportation, as well as determine noise levels for these modes. They have studied life cycle assessments and can compare the environmental impacts of different modes of transportation. They are familiar with methods for calculating various external effects.	
Content	The module covers the following topics: 1. Psychological fundamentals, including perception, information processing, judgment, and decision-making, 2. Research methods in psychology, 3. Traffic psychology, with a particular focus on issues of traffic safety and mobility, 4. Energy and fuel consumption in transportation, exhaust emissions, noise emissions, and greenhouse gas emissions from transportation, 5. Environmental comparison of various modes of transportation and propulsion systems, particularly life-cycle analysis, and 6. Assessment and planning procedures, particularly environmental impact assessments and the internalization of external costs.	
Teaching and Learning Methods	4 SWS lecture, and independent study.	
Requirements for Participation	No special knowledge is required.	
Usability	This module is one of 27 elective modules in the master's degree program Air Transport and Logistics, which must be chosen according to § 32 paragraph 3 of the examination regulations.	
Requirements for the Award of Credits	Credit points are awarded upon passing the module exam. The module exam consists of a 120-minute written exam. The exam is conducted in English.	
Credit Points and Grades	Students can earn 5 credit points for this module. The module grade corresponds to the grade on the exam.	
Häufigkeit des Moduls	The module is offered each academic year in the winter semester.	

Workload	The total workload is 150 hours.
Duration of the Module	The module lasts one semester.