



PerceptionLab

[back](#)

Motivation

How we perceive is important for our condition and for the development and use of our abilities. The purpose of this laboratory for the observation, analysis and assessment of human perception in the spatial and medial context is to develop empirically ascertained knowledge in connection with concrete experiences from planning practice into an application-oriented toolkit for design and planning.

The Perception Lab both sets goals in research and teaching and renders external services:

- As a research instrument, the Perception Lab examines and weights a wide variety of tasks in interdisciplinary teams from the various teaching fields and departments. Objects, spaces and the medial environment are placed into a systemic context.
- As a teaching instrument, the Perception Lab is incorporated into all phases of the study programme. The examinations permit the relationship of people to the object, the space and the medial environment to become ascertainable. Integrated into the teaching process, these relationships become understandable in a form which is verifiable and comprehensible for the students, both as a holistic system and in detail.
- The examinations in the Perception Lab permit the achievement of product, spatial and environmental optimisations which can be provided as external services: Examples are numerous in the construction, furniture, equipment and machine tool industries, all of which are well established in the eastern Westphalian area. But the same is also true of the health services and tourism industries; here, products and spaces designed to promote health and well-being can be checked and improved.

The following specific component goals have been formulated for the use of the Perception Labs:

- Execution of usability testing and studies, application tests and reports
- Development of user profiles, utility and application scenarios
- Construction of virtual space scenarios for the examination of their modes of action
- Examination and juxtaposition of the qualities of real and virtual spaces
- Development of demand analyses for materials, products, spaces and medial environments
- Development of suggestions for product optimisation.

In the development of objects, spaces and medial environment from the design to execution, various disciplines are involved in the planning process. With the Perception Lab, this necessity for interdisciplinary work is to be expanded with regard to research and teaching. To evaluate and optimise a solution for room or a building scientifically, methods of testing with prototype models or simulations are often necessary. Thus, the Perception Lab works interdisciplinarily, concentrating and using the knowledge from the different fields. On the other hand, various areas of the University use the laboratory, and profit from its facilities. The facilities and services of the laboratory can also be made available to outside institutions for test series, simulations and investigations.

Cooperative efforts take place at several levels: first, an internal exchange is institutionalised between the teaching area and departments, in single projects, or overarching projects on a certain topic. Cooperative efforts with other universities and institutions are in preparation, as are those with partners from business in the region and beyond. The first projects are now in the start-up phase.

The general goal of the Perception Lab is to make spatial perception scientifically verifiable, including, too, its emotional and atmospheric factors, and to use outside funding effectively, both in teaching and in research. Students are to deepen their orientation to practice, and address aspects of perception and utility more thoroughly.