



PhD Course

## Introduction to Health Sciences

block course:

27 + 28 May 2026 Moorweidenstr. 18, Room 2029

16 + 17 June 2026 Martinistr. 52, conference room W37

**Course Instructor:** Prof. Dr. Hans-Helmut König (UKE), Prof. Dr. André Hajek (UKE)

**Course Value:** 2 SWS = 5 credit points (CP)

**Assessment/Student evaluation:** Presenting a paper; grading will be pass/fail

**Course Language:** English

**Software:** N/A

**Registration:** Please register via STiNE. For all organizational matters please contact e-mail [andrea.buekow@uni-hamburg.de](mailto:andrea.buekow@uni-hamburg.de).

### Recommended Literature:

Friis RH, Sellers TA. Epidemiology for public health practice. 6th ed. Burlington MA: Jones & Bartlett Learning; 2021

Crosby RA, Salazar LF. Essentials of public health research methods. Burlington MA: Jones & Bartlett Learning; 2021

### Course Overview & syllabus:

This course will introduce PhD students to health sciences, with a focus on commonly used concepts, methods and research designs. We will present topics including measures of morbidity (e.g., prevalence or incidence) and research designs (observational, experimental and quasi-experimental). Moreover, measures of effect (e. g., absolute and relative effects) will be presented, followed by data interpretation issues (e. g., bias or confounding). Subsequently, sampling techniques (e.g., probability or non-prob-ability sampling methods) and sources of data (in particular data sets available for re-search will be presented here) will be presented.

In the second part, the PhD students will present and discuss studies related to quality of care. Here, they will refer to common guidelines (e. g. STROBE) and to the assessment of study quality using common tools (e. g. NIH Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies).

The course is designed for PhD students of the Research Training Group 'Managerial and economic dimensions of health care quality'.

**SYLLABUS**• **Day 1:**

Measures of morbidity/mortality	27.05.2026 9:00-12:15
Observational research design	André Hajek
Experimental research designs	27.05.2026 13:15-16:30
Quasi-experimental research designs	Hans-Helmut König

• **Day 2**

Measures of effect	28.05.2026 9:00-10:30
Data interpretation issues	Hans-Helmut König
Sampling techniques	28.05.2026 10:45-12:15
Sources of data	André Hajek

• **Day 3:**

Presentations by the PhD students	16.06.2026 9:00-12:15 André Hajek
Presentations by the PhD students	16.06.2026 13:15-16:30 Hans-Helmut König

**Day 4**

Presentations by the PhD students	17.06.2026 9:00-10:30 Hans-Helmut König
Presentations by the PhD students	17.06.2026 10:45-12:15 André Hajek