



PhD Course

Introduction to Health Sciences

block course: 6./7.3.2024 / 16./17.4.2024

<LOCATION; ROOM>

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

Course Value: 2 SWS

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

Course Language: English

Software: N/A

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

Registration: Please register via STiNE. For all organizational matters please contact e-mail andrea.buekow@uni-hamburg.de.

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-probability sampling methods) and sources of data (in particular data sets available for research 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:**

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|-------------------------------------|---------------------------|
| Measures of morbidity/mortality | 06.03.2024 9:00-12:15 |
| Observational research design | André Hajek |
| Experimental research designs | 06.03.2024 13:15-16:30 |
| Quasi-experimental research designs | Hans-Helmut König |

• **Day 2**

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|----------------------------|---------------------------|
| Measures of effect | 07.03.2024 9:00-10:30 |
| Data interpretation issues | Hans-Helmut König |
| Sampling techniques | 07.03.2024 10:45-12:15 |
| Sources of data | André Hajek |

• **Day 3:**

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|-----------------------------------|---------------------------|
| Presentations by the PhD students | 16.04.2024 9:00-12:15 |
| | André Hajek |
| Presentations by the PhD students | 16.04.2024 13:15-16:30 |
| | Hans-Helmut König |

• **Day 4**

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| Presentations by the PhD students | 17.04.2024 9:00-10:30 Hans-Helmut König |
| Presentations by the PhD students | 17.04.2024 10:45-12:15 André Hajek |