



Kurse International Health

Coordinator

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October - December

Medical School (5 ECTS)

"Medical School" comprises a set of classes with topics of importance for the international health setting. Session titles are ranging from major infectious and non-communicable diseases to specific subjects such as mental health, occupational safety and health. Emphasis is given on regional circumstances and policies within low- and middle-income countries.

Dates and times:

t.b.a.

Sessions:

approximately 25 (2 to 9 hours each, subject to change)

General learning goals:

- Increase awareness of the special circumstances in the health sector of low- and middle-income countries.
- Acquiring knowledge about major diseases within the international health setting.
- Understanding on future public health approaches of dealing with globally challenging infectious and non-communicable diseases.

Lecture titles (subject to change):

- Introduction to Medical School

- Emerging Infectious Diseases
- Fetal Alcohol Syndrome
- Helminths/Filariasis
- HIV Pathogenesis
- HIV Prevention
- Immunology
- Malaria
- Maternal Health
- Mental Health in Developing Countries
- Microscopy
- Mycobacterioses
- Neglected Tropical Diseases
- Non-Communicable Diseases
- Nutrition
- Occupational Safety and Health

- Outpatient Care
- Pediatrics
- Protozoal Infections
- Tuberculosis
- Vaccinology
- Virology

Type of examination:

Written exam with multiple choice questions

Policy and Politics (3 ECTS)

Policy and Politics comprises classes focussing on health policy and politics, humanitarian aid, health equity and equality, health promotion, development politics and health economics.

Dates and times:

t.b.a.

Sessions:

approximately 9 (4 hours each)

General learning objectives:

- Understand the principles of health systems, trends in national health policy reforms and the key elements in international health policy.
- Learning about basics of health promotion and to be able to differentiate between intervention, prevention and health promotion.
- Enabling to develop and evaluate a health promotion program.
- Getting acquainted with the health economics, types of economic evaluation and economics of the health systems.
- Understanding the history and politics of development cooperation and be sensitized to the normative underpinnings of policy work, health policy in the dynamics of development cooperation.
- Understanding the principles, objectives, ambitions and limits of humanitarian work while getting to know the principle actors and their differences in the field of humanitarian assistance.

Lecture titles (subject to change):

- From MDGs to SDGs
- Global Epidemiology
- Global Health Security
- Health Economics
- Health Promotion
- Health Systems
- Humanitarian Aid
- Human Rights and Development
- International Research

Type of examination:

Written exam with multiple choice questions

January - March

Courses on offer are conducted as contiguous blocks with a particular duration of one week each. These so called seminar weeks consist of 5 days of specialized intensive seminars. Proficiency exams consist of a seminar report of 500 words minimum to 1000 words maximum, to be delivered no later than 14 days after the end of the respective seminar week.

Learning Science (5 days, 1.5 ECTS)

The aim of this course is to transmit core competencies for academic teachers.

Dates and times:

t.b.a.

Content:

- Problem based learning: Development of study materials
- Curriculum development: Curriculum development cycle, Formulation of specific learning objectives
- Skills training: Application of the four-step method
- Microteaching and feedback techniques: Exercise for application of teaching skills, giving and receiving feedback
- Assessment theory and techniques: Basic concepts in psychometry, Oral assessments, Test item development (MCQ items, key feature test)
- Seminar techniques: Instructional techniques for seminars

Learning objectives:

At the end of the course, the student will be able to:

- define learning objectives
- compose study materials, e.g. a paper case for problem-based learning
- use microteaching as a method to improve their teaching
- translate into practice feedback techniques to and from another professional
- appraise basic concepts of psychometry as basis for teaching, learning and assessment theory

Assessment procedure:

Upon completion of the one-week on-campus course, all participants are required to deliver a brief report on their personal reception and retained contents of the course, to be submitted within 14 days after the last on-campus course day. Reporting templates will be provided by CIH Office. The reports are mandatory and will not be graded.

Laboratory Infection Diagnostics (5 days, 1.5 ECTS)

Content:

Polymerase Chain Reaction (1,5 days)

- Application of different PCR formats and techniques for the diagnosis of mycobacterial infections (e.g. Buruli ulcer) in the context of various clinical questions (conventional, gel based PCR, dry-reagent-based PCR, quantitative real-time PCR, loop-mediated isothermal amplification procedures (LAMP))
- Trouble-shooting
- Parameters for validation of various PCR assays

Molecular Cloning Techniques (2,5 days)

Learning and applying molecular cloning techniques. A target gene, encoding for the fluorescent mCherry protein, will be amplified and cloned into a standard plasmid vector. Competent *E. coli* bacteria will then be transformed with the newly generated transgene carrying plasmid. After culturing the bacteria in selective media, plasmids will be isolated and analyzed for the presence of the transgene. These techniques can for example be used to generate standards for Real Time PCR based quantification of pathogens.

Parasitology lifecycle based methods (Schistosomiasis) (1 day)

- Familiarization of students through pre-course assignment with the etiology, clinical presentation and particularly the life cycle of schistosomiasis.
- On-campus familiarization with diagnostic parasitology laboratory facilities. Discussion of ethical aspects of animal models for basic immunological research questions in the field of host-parasite interaction (schistosome mouse model). Presentation of the different life cycle steps of schistosomiasis in two hosts (mouse and molluscs). Perform methods for qualitative and quantitative analysis of schistosome infestation. Demonstration of methods to assess the hosts immune responses at given infection timepoints.

Dates and times:

t.b.a.

Assessment procedure:

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Public Health (5 days, 1.5 ECTS)

This course will have a certain focus on qualitative research methods. Systematic reviews, steps in carrying out a review and the common approaches to reporting the results reviews may also be covered. Aims are to recognize the value of qualitative research and the different approaches in qualitative research, to be able to design a qualitative study and to critically analyse qualitative data and studies, to deepen understanding in global epidemiology.

Dates and times:

t.b.a.

Lecture titles:

- Systematic Reviews
- Universal Health Coverage
- The Millennium Development Goals
- Qualitative Methods

Applied Clinical Research (5 days, 1.5 ECTS)

Content:

Theoretical aspects on study design, statistics and methodology of clinical research are taught as well as their implications on study planning and conduct. Practical aspects on selected steps during study preparation such as protocol writing or design of data collection tools will be trained in dept. Strategies to study management and final outcome dissemination will be presented and discussed in the context of the students' experience and background.

Learning Objectives:

At the end of the module, the student will be able to

- distinguish between the various interventional and non-interventional studies and should be able to identify when to use which study for which research question. He/she will be able to understand various study designs and is able to postulate sample size, primary objectives and further essential study documents and issues.
- identify the most essential milestones of a study/trial and will be able to start to prepare a protocol and design a CRF. Furthermore, the most important ideas and documents of a clinical study/trial can be summarized.
- apply a multitude of tools to manage and monitor a clinical study/trial for study overview. Finally, he/she will be able to trace the pathway from study results to policy making.

Lecture Titles:

- Introduction to Clinical Study Designs
- Clinical Study Design and Statistical Implications
- Essentials of a Clinical Study Protocol
- Basic Study Considerations
- Data Collection Tools & CRF Design
- Management of Study
- From Evidence to Policy, what happens after the end of a study

Dates and times:

t.b.a.

Spatial Epidemiology (5 days, 1.5 ECTS)

Content, Learning objectives and date/times:

t.b.a.

Downloads

- [Kurse International Health](#) (145 KByte)