In the Research Master’s in Global Health, students embark on an intensive study of cross-cutting aspects of health systems. They will obtain the latest insights, as well as design and implement interventions and innovation strategies to address these health challenges.

The programme focuses on teaching the knowledge, skills and attitude to (1) analyse complex national and international health challenges by drawing from a range of disciplines, and (2) design, implement and evaluate integral strategies for intervention in order to meet complex global health challenges. Building on systems thinking and research that combines and transcends individual disciplines, the programme offers an intensive study of multiple aspects of health systems, including burden of disease, finance, regulatory mechanisms, power constellations, the network society and change management.

The Research Master’s programme provides the opportunity to participate in one of the state-of-the-art global health research programmes that the Amsterdam Institute for Global Health and Development (AIGHD) runs on six continents. Students can customize their programme by selecting electives, a literature review and research projects that reflect their interests.

The year schedule can be found at the FALW-website.
Further information about the MSc programme Global Health.
A complete programme description can be found at the FALW-website.
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Expired programme components Global Health

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MSc Global Health year 1

Programme components:

- MSc Global Health year 1 compulsory courses
- MSc Global Health year 1 compulsory choice

MSc Global Health year 1 compulsory courses

Courses:

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MSc Global Health year 1 compulsory choice

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MSc Global Health year 2

Courses:

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Addressing Disease Burden in a Global Context

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<tr>
<td>Coordinator</td>
<td>dr. A.H.A. ten Asbroek</td>
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<td>dr. A.H.A. ten Asbroek</td>
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Course objective
In this course, current status and theories within the global health field regarding the Global Burden of Disease are introduced in lectures. This will be followed by in-depth lectures on specific topics delivered by a group of researchers from a wide range of research topics.

Also in this course, during 10 afternoons, you will learn how to use quantitative analysis methods. This is part of the Learning Track Research Methods: Quantitative research. For this you will need to have installed STATA on your personal laptop, which you will need to bring along during the work group sessions.

The student acquires knowledge and insight into:
- Disease burden in different parts of the world and its drivers
- Modeling of disease burden, incl. outbreaks
- Cause and effect of co-morbidity and double burden of disease Medical,
social, cultural and economic factors that play a role in co-morbidity and double burden of disease
- Complexity of (transdisciplinary) intervention development in co-morbidity, evaluation and financing
- Health systems’ responses to different burdens

The student learns
- To study different cases of co-morbidity in different cultures and countries
- To apply epidemiological methods for investigating and managing disease outbreaks
- To be aware and critical of their own actions, thinking and decision-making (including self-reflection of their role as a researcher in transdisciplinary research)
- To be solution-oriented
- To reflect ethically on responsibilities regarding the implementation of interventions

Course content
Low-income countries are confronted with a growing burden of chronic, non-infectious disorders and concurrently have a high incidence of infectious diseases (double disease burden). The interrelationship between some infections and chronic disease has been well-established.

These patterns of increasing co-morbidity and chronic diseases has a significant impact on public health, health systems and economic development.

- In the first week the focus will be on understanding the concepts of Burden of Disease – building on the content of the lecture from year 1. From here we will address the burden of non-communicable disease and what the specific challenges are in the context of urbanization.

- The second week will focus on the burden of infectious diseases, from control of infectious diseases in general to the burden of zoonoses and antimicrobial drug resistance to the role of demographic and disease modelling.

- The third week we spend on work done at the KEMRI (Kenya Medical Research Institute) and how we as researchers can develop the tool kit for quantitative studies. During the third week you will also work on an assignment in sub groups. The topic of the assignment is to develop the data collection tool kit for studying a particular phenomenon for an epidemiological study in the area of HIV in Kenya.

The fourth week is reserved for self study, a course review and two exams (one on quantitative methods and one on the content of the lectures.)

Concluding, you will individually need time for self-study to acquire the knowledge you need to accomplish the assignments during the course. The different activities are indicated in the schedule.

Form of tuition
Lectures, work groups, STATA practicals, problem-based learning, self-study

Type of assessment
The knowledge and skills gained in this course will be assessed in three different ways:
1. The assignment on quantitative survey tools
2. Exam on Quantitative Methods
3. Written Exam on the content of the other lectures.

The assignment will be weighed 20%
The Quantitative Exam 40 %
The Lectures Exam 40%.
Each of the three elements of assessment needs to be scored at least 5.5 for a “Pass”.

**Course reading**
- additional journal articles
- Quantitative methods: course material will be shared on BB.

**Remarks**
Obligatory course for Global Health students

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**Lecturer:**
dr. A.H.A. ten Asbroek (AIGHD)

**Advanced Methodology ILA in Global Health**

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<td>Lecture, Seminar</td>
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**Course objective**
The student will obtain in-depth knowledge and insights into:
- Theory on transdisciplinary research
- Different methodologies for transdisciplinary research
- When to use a transdisciplinary research approach (persistent or complex problems/many actors involved), also in comparison with other research methodologies
- Evaluation of transdisciplinary research (using quality criteria)
The student will learn to:
- Design a transdisciplinary research plan
- Independently select and combine research methods and techniques for transdisciplinary research, for example methods to analyse complex or persistent problems from different actor perspectives
Course content
Global health issues are often very complex and, for this reason, they are also called 'wicked' problems. It is increasingly recognized that addressing such problems requires the redefinition of the problem from the perspective of multiple actors. Besides actors from different scientific fields, one also needs to involve actors who are confronted with this problem in practice or in any other way. These actors have specific practical or experiential knowledge and ideas about the problem, and all actors approach it from their own perspective, based on their frame of reference.

In this course, the students will combine the required knowledge, attitudes and expertise to develop and execute a transdisciplinary research project. To achieve this, the student will use insights from a number of different approaches, including Interactive Learning & Action (ILA) and Community-Based Participatory Health Research. In addition, students will gain experience with advanced transdisciplinary research methods, including the Dynamic Learning Agenda and Reflective Monitoring and Evaluation. In small research teams, students will prepare a focus group script and practise their facilitation skills. Students will be coached in the development of interactive research skills, the involvement of diverse actors in a joint exploration of the problem, and the stimulation of learning processes. During the project, students will write a report that describes the different steps in a transdisciplinary research process and will present their findings in an oral presentation. An individual exam is also part of the assessment.

Form of tuition
Lectures (30 hr), working groups (35 hr), group work (65 hr), self study (30 hr). Attendance at working groups is compulsory.

Type of assessment
Individual written exam (40%), report (40%), facilitation of focus group discussion (10%), oral presentation of report (10%). All parts have to be concluded with at least a pass grade (6).

Course reading
Reader with selected scientific articles (to be announced on BlackBoard at least a month in advance).

Target group
Mandatory course for Global Health students

Aids, Medicine and Human Rights

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**Course content**
This is an external course, which is taught at the UvA Winterschool. It consists of the following two courses: (1) Anthropology of Sexuality, Aids and Reproductive Health (teacher: Eileen Moyer), and (2) Medicine and Human Rights: in Cross-Cultural Perspectives (teacher: Oliver Human). More information can be found in the UvA study guide http://studiegids.uva.nl/

**Registration procedure**
To register for this course, please send an e-mail to the MAS programme manager Mitchell Esajas M.O.Esajas@uva.nl. The deadline for application is November 14, 2014.

**Challenges in Health Systems Innovation**

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**Course objective**
The student acquires knowledge and insight relevant to
- Innovation and reform of health systems
- Central concepts in transition theory
- Different mechanisms of innovation development, so-called niche experiments, in the health system
- Effects and challenges of ‘niche experiments’ in different cultural contexts
- Different theoretical perspectives on innovation studies
- Theoretical concepts and methods for the management of system innovation, including transition and strategic niche management, essential for sustainable health systems and transdisciplinary research
- Theoretical concepts and methods to interpret and evaluate the results of system innovation and its efficiency
The student learns to:
- Apply theoretical knowledge to practical cases
- Evaluate his/her own actions, thinking and decision-making
- Be solution-oriented
- Reflect on responsibilities with respect to the implementation of interventions

**Course content**
The course consists of complementary theoretical and research components. The theoretical component develops insight, through lectures and seminars, into the central theoretical concepts of innovations and reform of health systems. Illustrative case studies are reality-based and use former as well as
current innovations and developments in health care systems of low- and higher-income countries, such as the introduction of primary health care or long-term care system innovations). Discussion focuses on:
- Difficulties in tackling certain persistent health problems
- Systemic factors that form the basis of these persistent problems
- The moderate effect of health reforms and emergence of unsustainable niche experiments
- Exploration of possibilities to effectively link niche experiments to existing regimes
- The importance of transdisciplinary research for system innovation

In the research component of the course, students work in pairs to analyse efforts to address a concrete persistent problem in a health system. This involves identification of underlying systemic factors, such as structures, culture, and existing practices, and delineating the role of the significant actors. Students conclude the course by designing a niche experiment for this problem according to the principles of transition management.

Form of tuition
Lectures, work groups, problem-based learning, self-study

Type of assessment
Written exam (50%) and assignment (50%). All parts need to be passed (6.0).

Target group
First-year students MSc Global Health

Remarks
Elective for Global Health students

Ethics in Global Health

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Course objective
The student acquires knowledge and insight into:
- The central concepts and theory in applied philosophy and professional ethics
- The role of ethical review committees in medical research
- Ethical aspects in relation to research
- Instruments for ethical reflection and analysis of moral dilemmas in the field of global health
- Evaluation of moral dilemmas including implicit and explicit moral choices that are made in global health issues
The student learns:
- Relevant topics in ethics (e.g. medical ethics, ethics of care, deontology and consequentialistic approaches)
- To develop an open and respectful attitude with respect to diverse value patterns
- To apply methods and techniques for facilitating constructive discussions about ethical aspects in global health research and issues
- To formulate a proper justification in research projects
- To tackle ethical dilemmas in a responsible and professional manner

Course content
Researchers in the field of global health gather knowledge through a transdisciplinary approach in a context where people often find themselves in vulnerable positions and where results can mean profound chances in their lives. It is important that researchers take responsibility for the decisions that they make when designing and implementing research and applying outcomes. In this course, the students learn about different methods and dilemmas appropriate for ethically justifiable research. Relevant case studies in the field of global health research are used for illustration. In small work groups, students are encouraged to deal impartially with ethical dilemmas. In the assignment students have to elaborate on their grand proposal and integrate ethical considerations.

Form of tuition
Lectures, workgroups, self-study.

Type of assessment
- individual ethical justification of grant proposal design (50%)
- exam (50%)
Both elements have to be passed (5,5 or higher).

Course reading
Available on Blackboard

Entry requirements
Course on Writing grant proposal (this proposal is input to the course).

Target group
Second-year students of research master in Global Health.

Remarks
Compulsory course for Global Health students

Future Medicine

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Course content
This is an UvA course. For the course description, please visit http://studiegids.uva.nl/
Course objective
The student acquires knowledge and insight into:
- The increasing complexity of global health questions from a historical perspective in high- and low-income countries
- Disease burden and diseases with a big impact, as well as insight into the development of effective interventions
- Border-crossing health problems from the perspective of different disciplines (biomedical sciences, epidemiology, health sciences, health economics, anthropology)
- Possibilities and limitations of old paradigms of health perspectives
- Positioning transdisciplinary research in relation to mono-, multi-, and interdisciplinary research
- Relationships between diverse global health problems (well structured versus complex problems) and various research approaches (mono- versus transdisciplinary)
- Overview of theory creation in transdisciplinary research (epistemology and methodology including criteria for scientific quality)
- Central concepts of transdisciplinary approaches, including participatory and active involvement of relevant societal actors, collective learning processes, and systems thinking.
- Steps in interdisciplinary and transdisciplinary research and related methodological aspects
- Different forms of "needs assessments" in relation to the nature of the problem
- Different qualitative and quantitative research methods

Course content
This course highlights the increasing complexity of health questions from a historical perspective. Various issues will be addressed, such as the significant societal impacts of diseases. For example, the relationship between unipolar depression and absenteeism and possible interventions will be investigated. This increasing complexity requires a transdisciplinary research approach rather than the limited and restrictive monodisciplinary approach used for highly structured health issues. The course consists of complementary theoretical and research components. In the theoretical component of the course, the student becomes acquainted with the problems in global health.

Through the use of HIV/AIDS and diabetes case studies, students are
taught about the complexity of an "emerging disease". This enhances the student's insight into different paradigms and models used to address global health issues. The student applies these to the case of HIV/AIDS and diabetes and learns the possibilities and restrictions of these paradigms.

In the research component of the course, the student acquires insight and skills to carry out various research methods that will enable the identification, analysis and prioritization of health problems at "community" level. Moreover, the student is provided with an overview of different qualitative and quantitative research methods that are important for transdisciplinary research, such as techniques in epidemiological statistics, document analysis, observation, interviews, and surveys/ questionnaires. In training workshops, students engage in document analyses and gain insight into how monodisciplinary research methods can contribute to the multi-, inter- and transdisciplinary analysis of complex problems. In different intervision groups, students work on health problems that extend beyond their own disciplinary boundaries. On the basis of a literature review, every student will write a research proposal for a needs assessment of a complex global health issue. Through a peer review system, groups, students provide feedback on different versions of their research plan in intervision groups.

Form of tuition
Lectures (28 hours)
Work groups and training (18 hours)
Seminars (10 hours)
Self study

Type of assessment
Written exam 50%
Research design (group assignment) 50%
Presentation
All parts need to be passed (6.0).

Course reading
P. Verschuren and H. Doorewaard. Designing a research project. 2nd edition (2010)

Target group
First-year students MSc Global Health; compulsory course

Remarks
Guest lecturers: Prof. J. Lange (AIGHD), Prof. F. Cobelens (AIGHD), Dr. G. ten Asbroek (AIGHD), Dr. F. van Leth (AIGHD), Dr. R. Gerrets (UvA).

Global Health Interventions
Course objective

1. The student can distinguish between health interventions and classify these according to primary, secondary and tertiary type interventions
2. The student can describe the characteristics, and give examples of successful health interventions
3. The student can mention five study designs for measuring the effect of health interventions
4. The student can summarise the main issues in the fields of infectious diseases and non-communicable diseases and critically review the literature on these two topics
5. The student can design a health intervention strategy on the basis of a case study
6. The student can design a framework for monitoring and evaluating a health interventions on the basis of a case study
7. The student can select relevant research methods for evaluating health interventions from an inter- (and trans)disciplinary perspective
8. The student can defend the health intervention strategy and framework for monitoring and evaluating its effects verbally and in written form

Course content

In this course, attention is paid to the relationship between the analysis of complex health problems and the design, implementation and evaluation of intervention strategies for specific health problems (in particular the determinants of effective health interventions).

Complex health problems manifest on different, interrelated levels: molecular, cellular, organism, population, society and global. The advantages and disadvantages of various interventions will be discussed. Interventions in the field of health care such as behaviour change relevant to compliance with medication will be discussed as well as overarching topics such as, the prioritization of scarce resources and the responsibility of governments to ensure safe, effective, efficient and cost-effective health services. The effect of global health interventions on different individual-, group- and societal levels is assessed from an economic and socio-cultural perspective, whereby students acquire insight into how economic and socio-cultural aspects play part in the design, implementation and feasibility of interventions and in different contexts. Research techniques, including using an inter- (and trans)disciplinary approach, different methods of evaluation, randomised controlled trials, and cohort studies, are taught and exercised.

In the research component of the course, students work in groups to design a case-based intervention strategy to prevent the transmission of HIV from mother to child as well as a framework for monitoring and evaluating this strategy. Each group receives feedback on different versions of their draft reports during the supervised workgroups. At the end of the course, students present their assignment to a panel of global health experts and their intervention reports will be critically assessed.
Form of tuition
Lectures, working groups, problem-based learning, self-study

Type of assessment
Written exam (50%), intervention report (group assignment) (30%) and a presentation of the assignment (20%). All parts have to be concluded with a grade of 5.5 or higher

Course reading
Reading materials for this course include several chapters from the book on Global Health by Merson et al (2012), selected articles and handouts during the course. An online reader will be made available on blackboard which indicates the required reading for each lecture.

Target group
First-year students MSc Global Health; compulsory course

Global Health Literature Review

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<tr>
<td>Coordinator</td>
<td>dr. M.B.M. Zweekhorst</td>
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<tr>
<td>Examinator</td>
<td>dr. M.B.M. Zweekhorst</td>
</tr>
<tr>
<td>Teaching method(s)</td>
<td>Study Group</td>
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Course objective
Students will:
- Acquire knowledge and insight into different methods and aspects of a systematic literature review
- Recognise and avoid bias in systematic literature reviews
- Write a literature review

Course content
Independently conduct a literature review under supervision in a chosen specialisation that will form the subject of the master’s thesis. Well-established methods exist for conducting systematic reviews of scientific literature, including making an overview or providing a theoretical analysis of the literature. The student will make a substantiated choice for a certain method and perform a literature review on its basis.

Form of tuition
(Individual) supervision and training

Type of assessment
Execution of research, written report (article) and presentation. All parts need to be passed (6.0).

Target group
Second-year students from the research master in Global Health
Remarks
Obligatory component for Global Health students

Global Health Master Thesis

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</tr>
<tr>
<td>Examinator</td>
<td>dr. M.B.M. Zweekhorst</td>
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Course objective
The student learns to:
- Independently design and carry out interdisciplinary or transdisciplinary research (under supervision)
- Recognise and address ethical implications of research results and their interpretation
- Hold scientific discussions in interdisciplinary teams
- Expand their personal, specialised network
- Deal with uncertainties in interdisciplinary- and transdisciplinary research
- Critically reflect on their own research and work experiences
- Orally present and defend the research in front of both a scientific and non-scientific audience

The student practices the following skills
- Independently designing a research project based on the research proposal written in the 'Writing research grant proposal' course (under supervision)
- Independently collecting, processing and analysing data (under supervision)
- Communicating with different stakeholders involved in the research
- Independently and responsibly working in a research organisation
- Monitoring the research quality
- Independently integrating theory and research data, which will lead to the production of a scientific article (under supervision)

Course content
In this second research internship, a concrete interdisciplinary- or transdisciplinary problem is formulated, based on descriptive and analytical questions on different levels of aggregation (individual, group, society, system). The complexity of the health problem, combined with the transdisciplinary research methods makes this internship more multifaceted compared to the first research internship.

The student starts with a literature scan to place the specific interdisciplinary- or transdisciplinary research problem in context and compare it with similar problems, and interpret it using an existing global health system model. This analysis provides the basis for the main research question as well as relevant sub-questions, and they will determine the research methodology. Quantitative and qualitative research methods are encouraged to gather data (observation, questionnaires, interviews, focus group discussions and/or dialogue meetings).
The research project culminates in a research portfolio and a scientific article written in English. The 5-month research project is supervised by a scientific staff member from one of the three collaborating partner institutes (VU, UvA, AMC).

**Form of tuition**
Individual supervision, meetings with the research team and progress interviews

**Type of assessment**
Article and oral presentation. All parts need to be passed (6.0).

**Target group**
Second-year students of the research master in Global Health

**Remarks**
Obligatory component for Global Health students.

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**Governance for Global Health**

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<td>prof. dr. J.E.W. Broerse</td>
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<td>Examinator</td>
<td>prof. dr. J.E.W. Broerse</td>
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<td>prof. dr. J.E.W. Broerse, M.O. Kok, dr. D.R. Essink</td>
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**Course objective**
The student acquires knowledge and insight into:
- The health policy process and its outcomes both at national and international level
- Different theoretical concepts of, and approaches to, the formulation, implementation and evaluation of policy in the field of public health
- Actors’ perspectives and participation, including power configurations inherent in policy making
- The role of scientific knowledge in policy making
- Interdisciplinary research methods in the context of policy development, implementation and evaluation

The student learns:
- To analyze a concrete complex health problem in a stipulated country from an interdisciplinary perspective, using actor analysis and causal root analysis
- To apply interviewing skills within the framework of health policy and system analysis
- To use a qualitative data analysis software program
- To formulate policy recommendations on the basis of a policy analysis
- To provide written report on analyses, findings, and policy recommendations in the form of a policy brief
Course content
The course consists of complementary theoretical and research components that run in parallel. The theoretical component addresses concepts of policy sciences. Attention is paid to the core concepts of power relations, interests, public versus private sector, change management and the network society. Emergent issues include the influence of political structures in the establishment of national health systems and health policies, determinants of what issues make it onto policy agendas, and criteria for converting scientific findings into policy. The degree to which international organizations, such as the WHO, the Gates Foundation, the World Bank and other multinationals reciprocally influence national health policy is discussed. The relationship between the effectiveness of interventions and implementation at different levels is analysed as well as the role of ‘public-private partnerships’ in health systems.

In the research component of the course, which runs in parallel to the lectures. Working in interdisciplinary project groups of five or six students, you adopt a project-based approach to conduct a health policy and systems analysis of a specific topic in a specific country. In the assignment, you explicitly include the specific determinants and the health system of that country in the analysis. At the same time, you identify and analyse barriers for the policy formulation and implementation. The data gathering involves a literature review, document analysis, and semi-structured interviews. In order to enhance these research skills, you receive two training workshops on interview techniques. On the last day of the first week you have to hand in your draft research design. In the next period you will conduct about 5-6 interviews (each student will prepare, conduct, transcribe and analyse one interview). For data analysis you will use the qualitative data analysis software program MAXQDA. You receive training on data analysis. Based on your policy analysis you will give policy recommendations.

Form of tuition
Lectures, master classes, workshops, work groups, problem-driven learning, self-study The workshops are compulsory.

Type of assessment
Written exam (50%), group assignment – policy analysis and advice (50%). All parts of the course must be graded sufficient/pass in order to pass this course.

Course reading
The following book is available in the VU bookstore:

Articles used are made available through blackboard.

Target group
Students of the research master Global Health

Remarks
Compulsory course within the research master Global Health

International Comparative Analysis of Health Systems
Course objective
Students acquire knowledge and insight into:
- Different ways in which health systems in different countries are formed
- Underlying reasons for reforming systems and different models for reforming health systems
- The relationship between system innovation and transdisciplinary research
- Different conceptual frameworks for carrying out a comparative analysis
- Benchmarking the cost effectiveness of different health systems

The student learns:
- To design and carry out a comparative analysis and to reflect on the scope of application, to make use of the framework for comparative studies (including transdisciplinary research)
- To write a clear, structured, academic paper about the comparative analysis conducted

Course content
Recent demographic and epidemiological developments occurring in health systems worldwide necessitate re-evaluation of the health care systems. Applicability, appropriateness and effectiveness of existing organizational structures, goals and frameworks will be critically analysed. In this course, the students gain insight into the complex world of ‘health systems comparison’. In lectures, quantitative and qualitative aspects of ‘health systems comparison’ are discussed and critiqued. Case studies of the health systems of France and Botswana clarify the economic and socio-cultural factors that are influential in the design and modification of the health systems.

Small group work (three students) provides opportunities to practise these skills by critically analysing reports of comparable research on health systems in Europe. Next, they make their own comparable analysis of three selected European countries according to a defined theme (for example, health insurance, primary health care). Subsequently, the analysis is extended by comparing earlier findings with an analysis made of two low-income countries. In this way the students are challenged to constantly improve their own analysis process. Interviewing ‘Health System Experts’ is part of the analysis. The findings are described in a group report and are presented in a poster.

Form of tuition
Lectures, work groups, problem-driven learning, self-study
Type of assessment
Written exam (60%), assignments (40%). All parts need to be passed (6.0).

Course reading
5. For each work group, 8 - 10 selected articles about different aspects of health systems.

Target group
First-year students MSc Global Health

Remarks
Compulsory course for Global Health students

Research Methods in Global Health

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Course objective
1. Learning objectives for the theoretical component (as covered through lectures and master classes):

At the end of the course, students are able to:
- describe, from a historical perspective, the increasing complexity of global health problems in high- and low-income countries;
- describe the relationships between diverse global health problems (well-structured versus complex problems);
- understand the main causes of the burden of disease in high- and low-income countries;
- describe border-crossing health problems from the perspective of different disciplines (biomedical sciences, epidemiology, health sciences, health economics, anthropology);
- understand the indicators and describe the main issues in the field of maternal health (including HIV mother-to-child transmission);
- describe the social, economic and cultural context of maternal health;
- recognize the global burden of mental health and describe the main issues in this field.

2. Learning objectives for the research component (as covered through lectures, workshops and assignment):
At the end of the course, students are able to:
- describe the advantages and limitations of various research approaches (mono-, multi-, and inter- and trans-disciplinary);
- describe theory creation in transdisciplinary research (epistemology and methodology including criteria for scientific quality);
- describe basic methods and techniques (epidemiology, statistics, scoping literature review, observation, interviews, surveys/questionnaires) and methods (quantitative, qualitative, mixed-methods) for analyzing complex health problems;
- design an interdisciplinary needs assessments in relation to a global health problem;
- prove good academic writing skills by writing a scientific report;
- communicate a scientific message to an academic audience;
- work as a valued team member in a project team;
- provide and receive feedback from peers and supervisors.

**Course content**

This course highlights the increasing complexity of health problems in a global context and builds the case for multi-, inter- and transdisciplinary research approach as a way to offer valuable insights into complex health problems and to create a broad acceptance of solutions among stakeholders.

The course consists of complementary theoretical and research components.

The theoretical component of the course consists of lectures and master classes. During the lectures, students becomes acquainted with current topics in global health, placed in a historical perspective. During the master classes, two specific fields of global health (namely, maternal health, including HIV mother-to-child transmission, and mental health) are used to illustrate the complexity of disease burden in a global context and to build the case for multi/inter- and transdisciplinary analysis of complex problems. Each master class consists of two sessions. The first session is organized as a lecture, in which the topic is approached from inter- and transdisciplinary perspectives. The second session is organized as a supervised critical reading workgroup, in which students discuss the most recent developments, as published in the literature, and thus become familiar with the different paradigms and models used in maternal health and in mental health.

The research component of the course consists of lectures, workshops and an assignment. During the lectures and workshops, students acquire basic knowledge and skills on research design, different research paradigms, quantitative and qualitative research methods and the combination thereof (i.e., mixed-methods). During the assignment, students design a needs assessment for exploring the problems associated with the prevention of HIV mother-to-child transmission in a specific context. The needs assessment is based on literature review and is conducted in small groups. Each group receives feedback on different versions of their draft reports during the supervised workgroups, and provide feedback to another group in one peer review round.

**Form of tuition**

- Lectures and workshops (~50 hrs)
- Work groups (assignment) (~60 hrs)
- Self-study (~50 hrs)
Type of assessment
Written report (30%), oral presentation (20%) and written exam (50%)
A grade of 5.5 or higher is required for each of these assessments

Course reading
Other resources (as announced on Blackboard)

Entry requirements
basic epidemiology

Target group
first year students in the research master global health

Remarks
Lecturers: Prof. dr. Jacqueline Broerse, Prof. dr. Paul Klatser, Prof. dr. Joske Bunders, Prof. dr. Frank Cobelens, dr. Barbara Regeer, dr. Guus ten Asbroek, dr. Dirk Essink, dr. Sorana Iancu

Research Project Global Health

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<tr>
<td>Coordinator</td>
<td>dr. M.B.M. Zweekhorst</td>
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Course objective
The student learns
- To independently prepare a transdisciplinary research design and develop this into a research proposal (under supervision)
- To independently collect, process and analyse research data (under supervision)
- To integrate former knowledge and skills into the research
- To work independently and responsibly in a research organisation
- To independently integrate theory and research data and to develop this into a research report (under supervision)
- To critically reflect on their own working methods and experience
- To monitor the quality of the research
- To deal with uncertainties
- To present the research orally and to defend it before a scientific public

Course content
In this first research internship, a concrete problem will be structured along descriptive (what is it about?) and analytical (what is the underlying cause?) questions. In this analysis a distinction is made between different levels of aggregation (individual, group, society, system) and appropriate monodisciplinary and transdisciplinary research methods.

The student starts with a scan of the literature to place the specific problem in context relative to comparable problems, and to interpret it by means of existing global health system models. This provides the basis for the main question and relevant sub-questions and will determine the research methodology. Data collection can take place
via questionnaires and qualitative interviews. The research project lasts 5 months and is supervised by a scientific employee from one of the three collaborating partners (VU, UvA, AMC).

**Form of tuition**
Individual supervision, meetings with the research team, progress interviews

**Type of assessment**
Written report, oral presentation. All parts need to be passed (6.0).

**Target group**
First-year students MSc Global Health

**Remarks**
Obligatory component for Global Health students

### Scientific Writing in English (AM_GH)

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<td>M. van den Hoorn</td>
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**Course objective**
The aim of this course is to provide Master’s students with the essential linguistic know-how for writing a scientific article in English that is well organized idiomatically and stylistically appropriate and grammatically correct. At the end of the course students
- know how to structure a scientific article;
- know what the information elements are in parts of their scientific article;
- know how to produce clear and well-structured texts on complex subjects;
- know how to cite sources effectively;
- know how to write well-structured and coherent paragraphs;
- know how to construct effective sentences;
- know what collocations are and how to use them appropriately;
- know how to adopt the right style (formal style, cohesive style, conciseness, hedging)
- know how to avoid the pitfalls of English grammar;
- know how to use punctuation marks correctly;
- know what their own strengths and weaknesses are in writing;
- know how to give effective peer feedback.

Final texts may contain occasional spelling, grammatical or word choice errors, but these will not distract from the general effectiveness of the text.
Course content
The course will start with a general introduction to scientific writing in English. Taking a top-down approach, we will then analyse the structure of a scientific article in more detail. As we examine each section of an article, we will peel back the layers and discover how paragraphs are structured, what tools are available to ensure coherence within and among paragraphs, how to write effective and grammatically correct sentences and how to choose words carefully and use them effectively.

Topics addressed during the course include the following:
- Structuring a scientific article
- Considering reading strategies: who is your readership? How do they read your text? What do they expect? How does that affect your writing?
- Writing well-structured and coherent paragraphs
- Composing effective sentences (sophisticated word order, information distribution).
- Arguing convincingly – avoiding logical fallacies
- Academic tone and style: hedging – why, how, where?
- Using the passive effectively
- Understanding grammar (tenses, word order, etc.)
- Understanding punctuation
- Referring to sources: summarising, paraphrasing, quoting (how and when?)
- Avoiding plagiarism
- Vocabulary development: using appropriate vocabulary and collocations

Form of tuition
Scientific Writing in English is an eight-week course and consists of 4 contact hours during the first week and 2 contact hours a week for the rest of the course. Students are required to spend at least 6 to 8 hours of homework per week. They will work through a phased series of exercises that conclude with the requirement to write several text parts (Introduction, Methods or Results section, Discussion and Abstract). Feedback on the writing assignments is given by the course teacher and by peers.

Type of assessment
Students will receive the three course credits when they meet the following requirements:
- Students hand in three writing assignments (Introduction, Methods or Results, Discussion) and get a pass mark for all writing assignments;
- Students provide elaborate peer feedback;
- Students attend all sessions;
- Students are well prepared for each session (i.e. do all homework assignments);
- Students actively participate in class;
- Students do not plagiarise or self-plagiarise.

Course reading

Target group
Registration procedure
Important: each group has a minimum of 18 and maximum of 24 participants, so students should register on time through VUnet to ensure a place in one of the (designated) groups. If you have registered for a group in VUnet, you are expected to attend all sessions (eight). If you decide to withdraw from the course, please do so in time. This all will avoid a 'fail' on your grade list for not taking part in this course and allows other students to fill in a possible very wanted group spot.

Each semester, one or more open/general groups also take place (with a minimum of 18 participants), for which students may register instead of the designated group for their master programme. Students are advised to consult their schedule carefully, since overlap may occur. For more information, please check course code AM_471023.

Remarks
- To do well, students are expected to attend all lessons. Group schedules are to be found at rooster.vu.nl and on Blackboard.
- If you (expect to) miss a session, please inform the group trainer as soon as possible. If you miss a session without notification, you may not be able to finish the course.
- For any questions concerning this course, please contact onderwijsbureau.beta@vu.nl.

Systems Thinking – Theory and Research Methods I

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<tr>
<td>Coordinator</td>
<td>dr. C.J. Aantjes MSc</td>
</tr>
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<td>dr. C.J. Aantjes MSc</td>
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<td>prof. dr. J.E.W. Broerse, dr. M. Campos Ponce, prof. dr. P.R. Klatser</td>
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Course objective
The student obtains knowledge and insight in
- Complex systems where diseases emerge and spread on different levels
- Systems thinking, system models and transdisciplinary research
- Various interventions for complex global health problems in high- and low-income countries
- Challenges with context-specific innovations for ‘health care delivery’
- Economic perspectives on interventions and innovations
- Social and cultural aspects of innovations and innovation strategies
- Interdisciplinary and transdisciplinary research methods for the development and implementation of complex innovations and
interventions in the field of global health. This ranges from needs assessment to interventions in transdisciplinary research
- Varied disciplinary and transdisciplinary approaches to monitoring and evaluation of interventions
- Theoretical concepts and methods to interpret results and evaluate the efficiency of programs

The student learns to:
- Analyse different innovations and interventions in global health
- Formulate implementation strategies within a health problem framework and identify and describe implementation problems
- Analyse and interpret case studies
- Design and implement research methods relevant for evaluating intervention strategies including focus groups, ‘learning histories’, randomized controlled trials, cohort study
- Be self-reflective in regard to actions, thinking and decision-making
- Be solution-oriented
- Be aware of the wide range of influences on interventions and to reflectively consider them whilst conducting the research
- Analyse data and integrate knowledge
- Present arguments verbally and in a written form

Course content
In this course, systems thinking is introduced. Complex health problems manifest on different, interrelated levels: molecular, cellular, organism, population, society and global. Initially, attention is paid to the relationship between the analysis of complex health problems (needs assessment) and the design, implementation and evaluation of intervention strategies for specific health problems (particularly determinants of effective health interventions). The advantages and disadvantages of various interventions will be discussed. The effect that these interventions have on different individual, group and societal levels is assessed from an economic and socio-cultural perspective. Subsequently, the student becomes acquainted with different development protocols to shape interventions, such as intervention mapping. Specific attention is paid to the economic dimensions of innovation in ‘health care delivery’, including ‘private funded insurance’ and the ‘value chain in health care’. Interventions in the field of health care such as behaviour change relevant to compliance with medication will be addressed. Discussion topics are, for example, the prioritization of scarce resources and ensuring the provision of safe, effective, efficient and cost-effective health services. Students acquire insight into the economic and socio-cultural aspects of innovations, implementation strategies, and their feasibility in different contexts. The last part of the course focuses on the evaluation of interventions, and comparisons are made between the first-, second-, third- and fourth-generation evaluation studies. The final study emphasizes a transdisciplinary approach. Research techniques, including focus group discussion, methods of evaluation, learning histories, randomised controlled trials, and cohort studies, are taught and exercised.
In the research component of the course, students work in pairs to design a transdisciplinary, case-based intervention for a global health issue. Half of the students choose from interventions applied in high- and low-income countries to which they apply the protocol of Intervention Mapping, amongst others. At the end of the course, the interventions are presented and their similarities and differences critically analysed.
Form of tuition
Lectures, work groups, problem-based learning, self-study

Type of assessment
Written exam (50%), intervention report (pairs assignment) (50%). All parts need to be passed (6.0).

Course reading
Reader with selected scientific articles:

Target group
First-year students MSc Global Health; compulsory course

Systems Thinking – Theory and Research Methods II

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<tr>
<td>Teaching method(s)</td>
<td>Lecture, Study Group</td>
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<td>Level</td>
<td>500</td>
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Course objective
The student acquires knowledge and insight into:
- Different theoretical concepts of the design and implementation of policy in the field of public health and the difference between monodisciplinary and transdisciplinary approaches
- Different elements of health systems and different organizational models
- Different health system financing strategies
- Underlying economic feasibility and sustainability assumptions of different models for reforming health systems
- Different research methods for analyzing policy and health systems
- Theories about the implementation of interventions on a systems level
- Actors’ perspectives and participation, including power configurations inherent in transdisciplinary research
- Deepening of interdisciplinary and transdisciplinary research methods including case histories

The student learns:
- To carry out an analysis of a concrete health policy in a stipulated country on a set theme in the context of specific determinants in the health system of that country
- Improving interviewing and focus group discussion skills within the framework of transdisciplinary research
- To integrate humanities, natural and social sciences disciplines as well as relevant societal knowledge
- Application of a causal analysis and ‘fact-value’ strategy
- Techniques for communicating and working together with social actors, including facilitating effective group processes and learning processes
- How to formulate policy recommendations on the basis of the analysis
- To deal with uncertainties and be open to value discussions and cultural diversity
- To have a reflective, critical and culturally sensitive attitude
- To work in project teams
- To provide verbal and written reports on analyses, findings, and policy recommendations.

Course content
In this course, students enhance their systems thinking by studying the wider context of health systems. Interactions between different actors such as governments and insurers, beneficiaries and healthcare providers are addressed, along with their different aims and interests. A power configuration exists between these actors depending on the system. Important dynamics are involved, such as decision-making power, development of medicines and the unequal distribution of finances in their development. Critical analysis of the evident disparity in the development of profitable (e.g. medicines lowering blood pressure) versus non-profitable medicines (e.g. malaria vaccine) is encouraged. The lack of attention for preventative measures in health is addressed, as well as the influence of ‘regulatory affairs’, such as the Nederlandse ZorgAuthoriteit, on the availability of medicine. Students research the positioning of interventions within the broader context of government policy and health systems. Knowledge and insight are acquired into the possibilities and challenges in realizing system innovation, in particular health system organization and management. Additionally, determinants of the effectiveness of health interventions and system innovations are investigated.

The course consists of complementary theoretical and research components that run in parallel. In the theoretical component, students obtain insight into the various elements of health systems, such as financing, allocation, regulation, public-private partnerships and service provision. Additionally, theoretical concepts of policy sciences and ‘health system research’ are addressed. Attention is paid to the core concepts of power relations, interests, public versus private sector, change management and the network society. Emergent issues include the influence of political structures in the establishment of national health systems and health policies, determinants of who makes it onto
policy agendas, and criteria for converting scientific findings into policy. The degree to which international organizations, such as the WHO, the Gates Foundation, the World Bank and other multinationals reciprocally influence national health policy is discussed. The relationship between the effectiveness of interventions and implementation at different levels is analysed as well as the role of ‘public-private partnerships’ in health systems.

In the research component of the course, students learn how to conduct a policy analysis and a health system analysis. Working in small groups (four students), they adopt a project-based approach to analyse a concrete health policy of a specific theme in a specific country. Students can choose an example from high- as well as low-income countries. In the assignment, they explicitly include the specific determinants and the health system of that country in the analysis. At the same time, the students identify and analyse barriers for the implementation of interventions. The data gathering involves a literature review, document analysis, focus groups and interviews. In order to enhance these research skills, students receive training in techniques such as communication with societal actors, facilitation of group processes, stimulation of learning processes and cultural sensitivity. The findings are described in a report and presented orally to the other students.

Form of tuition
Lectures, work groups, problem-driven learning, self-study

Type of assessment
Written exam (50%), group process (during the group assignment)(25%), research report and oral presentation (25%). All parts need to be passed (6.0).

Course reading
Reader with selected scientific articles:

Target group
First-year students MSc Global Health; compulsory course

Writing Research Grant Proposal

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<td>Period</td>
<td>Period 3</td>
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Course objective
The student acquires knowledge and insight into:
- Designing and implementing a transdisciplinary research proposal
- Requirements imposed by different research funders for a research proposal
- Important financing mechanisms and the ways in which a research proposal is appraised

The students learn
- To integrate former knowledge of theoretical frameworks and transdisciplinary research methods into a coherent research proposal
- To give feedback by means of a peer review
- To present competitive pitches

Course content
Lectures aim to strengthen knowledge about various components of an academic, transdisciplinary, 4-year (PhD)-research proposal. Elementary aspects of the research topic are addressed, such as problem definition, research approach, theoretical framework, research goal, research questions, methods, milestones, scientific and societal relevance and target group. Also, data collection, processing and analysis, validity criteria, ethical considerations and last but not least a work plan and budget are covered.

The student becomes acquainted with the context of research financing, and the financing requirements of similar research. During this course, the students individually develop under supervision a research proposal regarding a subject related to the previously conducted ‘Literature Review’. Due to the limitations in words of the formats of funding agencies, one of the main challenges is to write your proposal within these constraints. This implies that you have to identify the essential aspects of the proposal which are both scientific informative and will convince critical review boards to select your proposal for funding, i.e. to find formulations that address methodological excellence, urgency and originality. During the course you will receive individual feedback by the research staff and your peers on the drafts versions. Although the final grant research proposal justifies a 4 year PhD project, at the same time it will put your research in perspective for the Master’s thesis.

Form of tuition
Lectures 10 hours,
draft proposal feedback 4 hours
presentation feedback 4 hours
self study + writing grant proposal 62 hours

Type of assessment
Individual grant research proposal (80%) and oral competitive pitch (20%)
Course reading
In this course we work with response lectures. This implies that you direct the quality and depth of the teaching by preparing your questions in advance, i.e., related to your proposal and the scheduled chapters of the book: "Developing effective research proposals" by Keith F Punch. SAGE, 2005 (2nd Ed.) (161 pp).

Entry requirements
This course builds on the subject of the completed literature thesis which is in line with the chosen internship subject and the planning for the PhD project/proposal.

Target group
Obligatory and exclusive course for second-year students following the Research master Global Health.

Registration procedure
VU-net registration.

Remarks
The ethical justification in your grant proposal will be taken up in the next course Ethics in Global Health. In order to let you benefit from the feedback in both courses to optimize your proposal, the deadline of the Grant proposal has been shifted to the end of the course Ethics in Global Health. The assessment period starts consequently after the Ethics in Global Health course.