



## Global Health MSc

Vrije Universiteit Amsterdam - Fac. der Aard- en Levenswetenschappen - M Global Health (research) - 2013-2014

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 2013 - 2014 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](#) .

## Inhoudsopgave

MSc Global Health year 1	1
MSc Global Health year 2	1
Vak: Addressing Disease Burden in a Global Context (Periode 1)	1
Vak: Advanced Methodology ILA in Global Health (Periode 1)	3
Vak: Aids, Medicine and Human Rights (Periode 3)	5
Vak: Challenges in Health Systems Innovation (Periode 3)	6
Vak: Ethics in Global Health (Periode 3)	8
Vak: Future Medicine (Periode 3)	8
Vak: Global Health in Historical Perspective (Periode 1)	9
Vak: Global Health Literature Review (Periode 2)	11
Vak: Global Health Master Thesis (Ac. Jaar (september))	12
Vak: International Comparative Analysis of Health Systems (Periode 2)	13
Vak: Research Project Global Health (Ac. Jaar (september))	14
Vak: Scientific Writing in English (Ac. Jaar (september))	15
Vak: Systems Thinking – Theory and Research Methods I (Periode 1)	18
Vak: Systems Thinking – Theory and Research Methods II (Periode 2)	20
Vak: Writing Research Grant Proposal (Periode 3)	22

## MSc Global Health year 1

Vakken:

Naam	Periode	Credits	Code
<a href="#">Aids, Medicine and Human Rights</a>	Periode 3	6.0	AM_1028
<a href="#">Challenges in Health Systems Innovation</a>	Periode 3	6.0	AM_1026
<a href="#">Future Medicine</a>	Periode 3	6.0	AM_1027
<a href="#">Global Health in Historical Perspective</a>	Periode 1	6.0	AM_1022
<a href="#">International Comparative Analysis of Health Systems</a>	Periode 2	6.0	AM_1025
<a href="#">Research Project Global Health</a>	Ac. Jaar (september)	30.0	AM_1102
<a href="#">Systems Thinking – Theory and Research Methods I</a>	Periode 1	6.0	AM_1023
<a href="#">Systems Thinking – Theory and Research Methods II</a>	Periode 2	6.0	AM_1024

## MSc Global Health year 2

Vakken:

Naam	Periode	Credits	Code
<a href="#">Addressing Disease Burden in a Global Context</a>	Periode 1	6.0	AM_1045
<a href="#">Advanced Methodology ILA in Global Health</a>	Periode 1	6.0	AM_1044
<a href="#">Ethics in Global Health</a>	Periode 3	3.0	AM_1047
<a href="#">Global Health Literature Review</a>	Periode 2	9.0	AM_1046
<a href="#">Global Health Master Thesis</a>	Ac. Jaar (september)	30.0	AM_1116
<a href="#">Scientific Writing in English</a>	Ac. Jaar (september)	3.0	AM_471023
<a href="#">Writing Research Grant Proposal</a>	Periode 3	3.0	AM_1048

### Addressing Disease Burden in a Global Context

<b>Vakcode</b>	AM_1045 ()
<b>Periode</b>	Periode 1
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Aard- en Levenswetenschappen

<b>Coördinator</b>	dr. M.B.M. Zweekhorst
<b>Lesmethode(n)</b>	Werkgroep, Computerpracticum
<b>Niveau</b>	600

### Doel vak

The student acquires knowledge and insight into:

- Disease burden in different parts of the world and its drivers
- Modelling 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
- Pathogenesis, clinical characteristics, diagnosis of important infectious and chronic disorders
- 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 carry out a comparative analyses of different intervention programs (in-depth) through interdisciplinary and transdisciplinary research
- 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

### Inhoud vak

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. This is evidenced, for example, in the increase of co-morbidity of the HIV-infected population in relation to the morbidity of HIV-negative peers. Another example of this interrelationship is evident when considering the influence of age and lifestyle, HIV-related factors and side effects of antiretroviral therapy on an increased risk for cardiovascular diseases, insulin resistance, impaired kidney function and osteoporosis. Other common combinations of diseases include HIV/AIDS and tuberculosis, asthma and eczema, depression and anxiety disorders. This pattern of increasing co-morbidity and chronic diseases has a significant impact on public health, health systems and economic development.

Prevention of disease is also an important component of this course. Critical analysis of global prevention strategies is encouraged as well as investigation of the effectiveness of context-specific strategies.

Some of the following issues and questions are addressed:

- Can a polypill with generic medicines serve as a means of preventing cardiovascular diseases?
- Can food supplements serve as a means of prevention?
- What are advantages and disadvantages of these interventions?
- What intervention has the most effect in which setting?

In this course, different challenges, interventions and innovation strategies that deal with co-morbid disorders are discussed. Different challenges of co-morbid disorders are addressed as well as multifactorial influences. Investigation into successful interventions for co-morbid disorders is encouraged. The research assignment involves students working in pairs to analyse co-morbid diseases and possible interventions in a transdisciplinary manner.

Additionally, the afternoons will also be used to gain knowledge and skills in quantitative methodology and analysis.

### Onderwijsvorm

Lectures, work groups, problem-based learning, self-study

### Toetsvorm

Written exam (50%) and assignment (50%).

### Literatuur

1. Challenges in predicting climate and environmental effects on vector-borne disease, episystems in a changing World, W. J. Tabachnick, The Journal of Experimental Biology 213, 946954, 2010

2. Burden of general medical conditions among individuals with bipolar disorder, Kilbourne et al., Bipolar Disorders, Volume 6, Issue 5, pages 368–373, 2004

3. CommunityBased Research in India: A Case Example of International and Transdisciplinary Collaboration, Stephen et al., Am J Community Psychol (2006) 38:95–111

### Overige informatie

Obligatory course for Global Health students

## Advanced Methodology ILA in Global Health

<b>Vakcode</b>	AM_1044 ()
<b>Periode</b>	Periode 1
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Aard- en Levenswetenschappen
<b>Coördinator</b>	prof. dr. J.G.F. Bunders-Aelen
<b>Docent(en)</b>	dr. B.J. Regeer
<b>Lesmethode(n)</b>	Hoorcollege, Werkcollege
<b>Niveau</b>	600

### Doel vak

The student will obtain in-depth knowledge and insights into:

- Theory and different methodologies for transdisciplinary research
- Strong and weak aspects of this type of research, also in comparison with other research methodologies
- Evaluation of interdisciplinary and transdisciplinary research (using quality criteria)

The student will learn to:

- Independently select and combine research methodologies and techniques

for interdisciplinary and transdisciplinary research

- Design and implement a transdisciplinary research plan
- Apply advanced methods and techniques for the facilitation of group processes for the achievement of knowledge integration (learning): for example, dialogue meetings or design workshops
- Apply methods and techniques for dealing with power inequalities in heterogeneous group processes
- Formulate implementation strategies that make a contribution to the solution of Global Health issues
- How to monitor and evaluate the quality and effectiveness of interdisciplinary and transdisciplinary research

### **Inhoud vak**

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 implement a transdisciplinary research project. To achieve this, the student will use insights from a number of different approaches, including Interactive Learning in Action (ILA) and Community-based Participatory Health Research. In addition, students will gain experience with advanced transdisciplinary research methods, including dynamic learning agendas and reflective monitoring and evaluation. In small research teams, students will organise focus group discussions and dialogue meetings with different actors as part of ongoing projects of the Athena Institute. Every student will have the opportunity to facilitate in at least one group discussion, and to assist in other group discussions. 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, the research team will develop a portfolio that describes the different steps in the research process and the results and will present their findings in an oral presentation. An individual exam also is part of the assessment.

### **Onderwijsvorm**

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

### **Toetsvorm**

individual written exam (40%), portfolio (40%), individual contribution to team work (10%), oral presentation (10%)

### **Literatuur**

- Reader with selected scientific articles
- Chapters from The Oxford Handbook of Interdisciplinarity, Oxford: Oxford University Press, 2010
- Methodological challenges of transdisciplinary research, C. Pohl, G. Hirsch Hadorn, *Natures Sciences Sociétés* 16 (2008) 111-121

### **Doelgroep**

Mandatory course for Global Health students

# Aids, Medicine and Human Rights

<b>Vakcode</b>	AM_1028 ()
<b>Periode</b>	Periode 3
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Aard- en Levenswetenschappen
<b>Niveau</b>	500

## Doel vak

The student acquires knowledge and insight into:

- State-of-the-art social-cultural research into AIDS at the beginning of the 21st century
- Transdisciplinary research for studying AIDS
- Transdisciplinary perspectives on a variety of subjects in the field of medicine and human rights
- Transdisciplinary research methods for studying and analysing case studies about the abuse of human rights in different cultures, and 'the right to medical care' in situations of conflict and rebuilding, asylum and extradition

## Inhoud vak

This course gives a state-of-the-art overview of the anthropology of AIDS; promotes the analysis of AIDS in a broad social, political and economic context; and extensively explores the possibilities for combining qualitative and quantitative methods for studying AIDS. Students apply these insights to case studies that illustrate the complexity of AIDS, and they reflect on how anthropological research can contribute to the design of interventions to fight AIDS. While the disease and efforts to fight AIDS have flourished for more than 20 years, AIDS is often formulated in terms of crisis, and thereby little room is left to study the already achieved successes and failures, or to make a comparison with other efforts promoting public health. At the interface of sexuality and death, AIDS is a potential metaphor for inequality, the failures of modernisation, and the rise of globalisation. Those infected with AIDS are often stigmatised and associated with the collapse of morality in society. This paradox, where the individual as well as structural political and economic factors are blamed for the spread of the disease, creates a number of possibilities for studying the meanings and causes that people attribute to the disease. Placing AIDS into the context of everyday life allows us to better understand how people live with AIDS.

The second half of the course is directed towards more complex problems: AIDS in conflict situations. Legislation on human rights provides a standard for medical care for victims of war and abuse for example. What is the role of culture in the application of this legislation in conflict and post-conflict situations around the world? Ensuring human rights generally leads to nothing. Why is this? The anthropological argument is that respect and justice presume a deep knowledge of what is at stake for the victims, perpetrators, politicians, witnesses, judges, and doctors. What do human rights mean for these stakeholders? How do victims deal with their suffering if they do not value themselves? During this course, students are introduced to a multidisciplinary perspective on a variety of topics in the field of medicine and human rights. Topics discussed include: incidences of human rights abuse in

different cultures, the 'right to medical care', and human rights in situations of conflict and rebuilding, asylum and extradition. Care providers and scientists are confronted with human rights at home and abroad, when they are working in a centre for asylum seekers, or in a psycho-trauma centre, in humanitarian NGOs, or in fieldwork and research.

### Onderwijsvorm

Lectures, work groups, problem-driven learning, self-study

### Toetsvorm

Written exam (50%) and assignment (50%)

### Literatuur

Syllabus with articles that is put together each year. Returning core literature is

1. Ishay, Micheline (2008) *The History of Human Rights*. Berkeley: University of California Press (excerpts)
2. Merry, Sally Engle. (2006) "Transnational Human Rights and Local Activism: Mapping the Middle," *American Anthropologist* 108(1): 385-1.
3. Robins, Steven. (2006) "From 'Rights' to 'Ritual': AIDS Activism in South Africa," *American Anthropologist*, 108(2): 312-323.
4. Mark Heywood (2009), 'South Africa's Treatment Action Campaign: Combining Law and Social Mobilization to Realize the Right to Health', *Journal of Human Rights Practice*, 1(1), 14 – 36.
5. Hastrup, K. (2003) Violence, suffering and human right: anthropological reflections, *Anthropological Theory* 3(3): 309-323.
6. Iliffe, John, 2006, *The African AIDS Epidemic: A History*.
7. Nguyen, Vinh-kim, 2007, *Antiretroviral Globalism, Biopolitics, and Therapeutic Citizenship*, in *Global Assemblages: Technology, Politics and Ethics as Anthropological Problems*, London: Blackwell. Pages. 124-144.
8. Scheper-Hughes, Nancy, 1992, *Death Without Weeping: The Violence of Everyday Life in Brazil*, Introduction, Berkeley: University of California Press.

### Doelgroep

First-year MSc Global Health

### Overige informatie

Co-ordinator: dr. Jarrett Zigon, teachers: prof. A. Hardon, dr. J.

Zigon, dr. T. Gerrits, dr. R. Reis

This course is an elective

## Challenges in Health Systems Innovation

<b>Vakcode</b>	AM_1026 ()
<b>Periode</b>	Periode 3
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Aard- en Levenswetenschappen
<b>Coördinator</b>	prof. dr. J.G.F. Bunders-Aelen
<b>Docent(en)</b>	prof. dr. J.T. de Cock Buning
<b>Lesmethode(n)</b>	Hoorcollege, Werkgroep
<b>Niveau</b>	500

## **Doel vak**

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

## **Inhoud vak**

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.

## **Onderwijsvorm**

Lectures, work groups, problem-based learning, self-study

## **Toetsvorm**

Written exam (50%) and assignment (50%)

## **Doelgroep**

First-year students MSc Global Health

## **Overige informatie**

## Ethics in Global Health

<b>Vakcode</b>	AM_1047 ()
<b>Periode</b>	Periode 3
<b>Credits</b>	3.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Aard- en Levenswetenschappen
<b>Coördinator</b>	prof. dr. J.T. de Cock Buning
<b>Lesmethode(n)</b>	Werkgroep, Hoorcollege
<b>Niveau</b>	500

## Future Medicine

<b>Vakcode</b>	AM_1027 ()
<b>Periode</b>	Periode 3
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Aard- en Levenswetenschappen
<b>Niveau</b>	500

### Doel vak

The student acquires knowledge and insight into

- Innovative developments that can change medicine and health systems now and in the future, such as telemicrobiology, new imaging techniques, rational drug design, personalised medicine, tailoring medicine and telemedicine, and the newest developments in the field of gene therapy
- Innovative processes in the development trajectory of new medicine
- Experimental immunological interventions for chronic diseases
- The meaning that these developments can have in different system contexts (high- versus low-income countries, private versus public care systems, systems with different underlying cultures and states of technique)

The student learns

- To apply theoretical knowledge to concrete practical cases
- To carry out a transdisciplinary scenario analysis by means of a specific innovative development in a particular system context

### Inhoud vak

National health systems have big challenges ahead of them, such as a greying society, faster spreading of (new) diseases, resistance against existing medication. The easy solutions have already been implemented. Traditional medicine development and compensation systems are under pressure. New solutions need to be found in new developments and by combining knowledge and skills in different disciplines, different sectors and both public and private organisations.

In this course, promising new developments will be studied, such as translational medicine, in which pharmaceutical companies, governments, hospitals and universities jointly invest. Other examples are the new

imaging techniques in combination with telemedicine, enabling the 'Heart Institute of the Caribbean' to offer cheap local treatments with advice from renowned Swiss surgeons. We also study the challenges that these new developments bring along. How can translational medicine ensure faster and cheaper medicine development while at the same time guaranteeing the patients' privacy? How do we make sure that these developments remain focussed on the patients' benefit and recovery? Experimental immunological research for chronic diseases and gene therapy will also be discussed: what are the problems now, and what do they look like in the future? What role can telemicrobiology play in this?

In groups of five, the students choose one development for which they make a transdisciplinary scenario analysis in a particular system context. All system levels will be addressed. The course culminates in a presentation of the scenarios in a small congress.

### Onderwijsvorm

Lectures, work groups, problem-driven learning, self-study

### Toetsvorm

Written exam (50%) and assignment (50%)

### Literatuur

Syllabus of articles is put together each year

### Doelgroep

First-year students in research master in Global Health

### Overige informatie

Co-ordinator: prof. J. Lange, teachers: prof. J. Lange, dr. C. Schultsz

Elective course

## Global Health in Historical Perspective

<b>Vakcode</b>	AM_1022 ()
<b>Periode</b>	Periode 1
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Aard- en Levenswetenschappen
<b>Coördinator</b>	dr. A.M.S. Belonje MD
<b>Docent(en)</b>	prof. dr. J.E.W. Broerse, S.C. Iancu MSc, prof. dr. J.G.F. Bunders-Aelen, prof. dr. P.R. Klatser
<b>Lesmethode(n)</b>	Hoorcollege, Werkcollege, Werkgroep, Computerpracticum
<b>Niveau</b>	500

### Doel vak

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

### **Inhoud vak**

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.

### **Onderwijsvorm**

Lectures (28 hours)

Work groups and training (18 hours)

Seminars (10 hours)

Self study

### Toetsvorm

Written exam 50%  
Research design (group assignment) 50%  
Presentation

### Literatuur

M. Merson et al. Global Health. 3rd edition (2012).  
P. Verschuren and H. Doorewaard. Designing a research project. 2nd edition (2010)  
P. Webb et al. Essential epidemiology. 2nd edition (2010).

### Doelgroep

First-year students MSc Global Health; compulsory course

### Overige informatie

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 Literature Review

<b>Vakcode</b>	AM_1046 ()
<b>Periode</b>	Periode 2
<b>Credits</b>	9.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Aard- en Levenswetenschappen
<b>Coördinator</b>	dr. M.B.M. Zweekhorst

### Doel vak

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

### Inhoud vak

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.

### Onderwijsvorm

(Individual) supervision and training

### Toetsvorm

Execution of research, written report (article) and presentation

### Doelgroep

Second-year students from the research master in Global Health

### Overige informatie

## Global Health Master Thesis

<b>Vakcode</b>	AM_1116 ()
<b>Periode</b>	Ac. Jaar (september)
<b>Credits</b>	30.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Aard- en Levenswetenschappen
<b>Coördinator</b>	dr. M.B.M. Zweekhorst

### Doel vak

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)

### Inhoud vak

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).

### Onderwijsvorm

Individual supervision, meetings with the research team and progress interviews

### Toetsvorm

Article and oral presentation

### Doelgroep

Second-year students of the research master in Global Health

### Overige informatie

Obligatory component for Global Health students.

## International Comparative Analysis of Health Systems

<b>Vakcode</b>	AM_1025 ()
<b>Periode</b>	Periode 2
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Aard- en Levenswetenschappen
<b>Coördinator</b>	prof. dr. J.E.W. Broerse
<b>Docent(en)</b>	prof. dr. J.E.W. Broerse, prof. dr. J.T. de Cock Buning, prof. dr. G.J. van der Wilt
<b>Lesmethode(n)</b>	Hoorcollege, Werkgroep
<b>Niveau</b>	500

### Doel vak

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

### Inhoud vak

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.

### Onderwijsvorm

Lectures, work groups, problem-driven learning, self-study

### Toetsvorm

Written exam (60%), assignments (40%)

### Literatuur

1. Y.M. van Kemenade (2007) Healthcare in Europe 2007. Maarssen: Elsevier Gezondheidszorg.
2. Chapters from: The Oxford Handbook of Interdisciplinarity, Oxford Press New York, 2010
3. Systems Thinking to Improve the Public's Health, Scott et al., Am J Prev Med 2008; 35
4. Klein, J.T. (2008) Evaluation of Interdisciplinary and Transdisciplinary Research. American Journal of Preventive Medicine 35 (2), pp. 116-123.
5. For each work group, 8 - 10 selected articles about different aspects of health systems.

### Doelgroep

First-year students MSc Global Health

### Overige informatie

Compulsory course for Global Health students

## Research Project Global Health

<b>Vakcode</b>	AM_1102 ()
<b>Periode</b>	Ac. Jaar (september)
<b>Credits</b>	30.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Aard- en Levenswetenschappen
<b>Coördinator</b>	dr. M.B.M. Zweekhorst

### Doel vak

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

### **Inhoud vak**

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).

### **Onderwijsvorm**

Individual supervision, meetings with the research team, progress interviews

### **Toetsvorm**

Written report, oral presentation

### **Doelgroep**

First-year students MSc Global Health

### **Overige informatie**

Obligatory component for Global Health students

## Scientific Writing in English

<b>Vakcode</b>	AM_471023 ()
<b>Periode</b>	Ac. Jaar (september)
<b>Credits</b>	3.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Aard- en Levenswetenschappen
<b>Coördinator</b>	M. van den Hoorn
<b>Lesmethode(n)</b>	Werkgroep
<b>Niveau</b>	400

### **Doel vak**

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.

### **Inhoud vak**

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

### **Onderwijsvorm**

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.

## **Toetsvorm**

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.

## **Literatuur**

Effective Scientific Writing: An Advanced Learner's guide to Better English (A. Bolt & W. Bruins, ISBN 978 90 8659 6171). VU bookstore: €27.95.

## **Doelgroep**

This course is only open to students of the Master's programmes of the Faculty of Earth and Life Sciences mentioned below. These students are only eligible to the course if they have already conducted scientific research (e.g. for their Bachelor's thesis) or if they will be working on a research project when taking Scientific Writing in English.

Faculty of Earth and Life Sciences - Master's programmes:

- Biology;
- Health Sciences;
- Ecology;
- Biomolecular Sciences;
- Biomedical Sciences;
- Neurosciences;
- Global Health;
- Management, Policy Analysis and Entrepreneurship in Health and Life Sciences.

## **Overige informatie**

- To do well, students are expected to attend all lessons. Group schedules are to be found at [rooster.vu.nl](http://rooster.vu.nl) and on Blackboard.
- A VUnet registration for this course is necessary in order to enroll or be enrolled in a Blackboard group. The VUnet registration automatically gives access to the corresponding Blackboard site.
- Group enrollment only takes place via Blackboard. For open/general groups: students have to enroll themselves following FALW programmes containing this course. For group assigned to specific studies, students are enrolled by the course coordinator).
- Make sure Scientific Writing in English does not overlap with another course.
- If you have registered for a group in Blackboard, you are expected to attend all sessions (eight). If you decide to withdraw from the course, do so in time, both on Blackboard and in VUnet. 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.
- 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 the course coordinator Marieke Zantkuijl: [m.c.l.zantkuijl@vu.nl](mailto:m.c.l.zantkuijl@vu.nl)

## Systems Thinking – Theory and Research Methods I

<b>Vakcode</b>	AM_1023 ()
<b>Periode</b>	Periode 1
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Aard- en Levenswetenschappen
<b>Coördinator</b>	dr. A.M.S. Belonje MD
<b>Docent(en)</b>	prof. dr. J.E.W. Broerse, dr. M. Campos Ponce, prof. dr. P.R. Klatser
<b>Lesmethode(n)</b>	Hoorcollege, Werkcollege, Werkgroep
<b>Niveau</b>	500

### Doel vak

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

### Inhoud vak

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.

### **Onderwijsvorm**

Lectures, work groups, problem-based learning, self-study

### **Toetsvorm**

Written exam (50%), intervention report (pairs assignment) (50%)

### **Literatuur**

Reader with selected scientific articles:

1. The SAGE Handbook of Applied Social Research Methods, 2d ed. Eds. Leonard Bickman and Debra J. Rog, Sage Publications, 2008
2. Statistics for Epidemiology, by Nicholas P. JEWELL, Boca Raton, FL: Chapman & Hall/CRC, 2004, ISBN 1584884339
3. Discovering Statistics Using SPSS, by Andy Field, 3rd Revised edition, 2009, SAGE Publications Ltd
4. Toward Transdisciplinary Research. Historical and Contemporary Perspectives. Frank Kessel et al., Am J Prev Med 2008;35(2S):S225–S234
5. Systems thinking and modeling for public health practice, Leischow SJ, Milstein B, American Journal of Public Health, 2006, 96(3): 403-405
6. Reader with recent articles from journals such as 'Lancet', 'Nature Medicine', 'Science', 'Tropical Medicine and International Health', 'Global Public Health', and 'International Health', 'American Journal of Public Health', 'Health Policy', 'British Medical Journal', 'Globalization and Health', 'Journal of Health Services Research and Policy', 'Applied Health Economics and Health Policy', 'Health Policy & Planning', 'Global Health Promotion', 'Vaccine', 'AIDS' and others.

## Doelgroep

First-year students MSc Global Health; compulsory course

## Systems Thinking – Theory and Research Methods II

<b>Vakcode</b>	AM_1024 ()
<b>Periode</b>	Periode 2
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Aard- en Levenswetenschappen
<b>Coördinator</b>	prof. dr. J.E.W. Broerse
<b>Docent(en)</b>	prof. dr. J.E.W. Broerse
<b>Lesmethode(n)</b>	Hoorcollege, Werkgroep
<b>Niveau</b>	500

### Doel vak

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.

## **Inhoud vak**

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 ZorgAutoriteit, 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.

## **Onderwijsvorm**

Lectures, work groups, problem-driven learning, self-study

## **Toetsvorm**

Written exam (50%), group process (during the group assignment)(25%), research report and oral presentation (25%)

### Literatuur

Reader with selected scientific articles:

1. The SAGE Handbook of Applied Social Research Methods, 2d ed. Eds. Leonard Bickman and Debra J. Rog, Sage Publications, 2008
2. Statistics for Epidemiology, by Nicholas P. JEWELL, Boca Raton, FL: Chapman & Hall/CRC, 2004, ISBN 1584884339
3. Discovering Statistics Using SPSS, by Andy Field, 3rd Revised edition, 2009, SAGE Publications Ltd
4. What is progress in transdisciplinary research? Pohl, C., Futures 43, pp. 618-626, 2011
5. Practical Challenges of Systems Thinking and Modeling in Public Health, Trochim et al., Am J Public Health. 2006;96(3):538-46
6. Reader with recent articles from journals such as 'Lancet', 'Nature Medicine', 'Science', 'Tropical Medicine and International Health', 'Global Public Health', and 'International Health', 'American Journal of Public Health', 'Health Policy', 'British Medical Journal', 'Globalization and Health', 'Journal of Health services research and policy' 'Applied Health Economics and Health Policy', 'Health Policy & Planning', 'Global Health Promotion', 'Vaccine', 'AIDS' and others.

### Doelgroep

First-year students MSc Global Health; compulsory course

## Writing Research Grant Proposal

<b>Vakcode</b>	AM_1048 ()
<b>Periode</b>	Periode 3
<b>Credits</b>	3.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Aard- en Levenswetenschappen
<b>Coördinator</b>	prof. dr. J.T. de Cock Buning
<b>Docent(en)</b>	prof. dr. G.J. van der Wilt
<b>Lesmethode(n)</b>	Werkgroep
<b>Niveau</b>	600

### Doel vak

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

### Inhoud vak

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'. The research proposal is presented orally at the end of the course. It forms the basis of the research for the Master's thesis.

**Onderwijsvorm**

Lectures, problem-based learning, self-study

**Toetsvorm**

Individual research proposal (80%) and oral presentation (20%)

**Literatuur**

Literature will be made available on Blackboard

**Doelgroep**

Second-year students of the research master in Global Health

**Overige informatie**

Obligatory course for Global Health students