UNIVERSITY OF COPENHAGEN
Faculty of Health and Medical Sciences

CURRICULUM 2013

Master of Science in Global Health

The programme is delivered in accordance with the Danish Ministerial Order no. 814 of 29 June 2010 on bachelor's and master's programmes (candidatus) at universities (the ministerial order of the study programmes). The programme is offered under the Global Health Study Board at the University of Copenhagen.

Graduates of the MSc programme are awarded the Danish title ‘cand.scient. (candidatus/candidata scientiarum) i global sundhed’ and the English title ‘Master of Science (MSc) in Global Health’.

Applicable to students enrolling in one of more of the below components of the Master of Science in Global Health (MScGH) as of 1 September 2013.
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Version academic year 2013/2014
Chapter 1. Programme objectives and competence profile

The programme aims to produce candidates who are able to analyse determinants impacting human health and disease, ranging from individuals to society and focussing on the global perspective. Graduates will have a broad insight into global issues affecting health and diseases and possess problem solving skills to address, in depth, questions and issues of global health. Furthermore, the candidates will be able to design, carry out and co-ordinate research projects and evidence-based interventions, and to evaluate the effects of these interventions.

During the programme, students will acquire the knowledge, skills and competencies listed below to both work and research in the field of global health. Students will also acquire additional individual qualifications through elective courses, field work, project work, and by writing an MSc thesis related to one of the following four study tracks:

1) Policy, Financing and Health Care Systems
2) Disease Burden, Challenges and Changes
3) E-health and ICT in Health
4) Research and Research Communication

1.1 Knowledge
MScs in Global Health will:

- Possess knowledge on, and have the ability to prioritise among the major determinants impacting human health and disease; ranging from individuals to society, and focussing on the global perspective. The determinants include stakeholders; policies; economy; environment; demographic and climate change; conflicts; and environmental, cultural and social factors at local, national, regional, international and global levels.
- Possess knowledge on, and be able to discuss, the multiple burden of diseases with an emphasis on low- and middle-income societies (e.g. communicable as well as non-communicable diseases; reproductive and child health; transition in health; primary health care; health economics; health systems; human resources for health; intercultural communication; and strategies and tools for health promotion and disease control).
- Be able to identify complex problems related to global health issues and possess knowledge, based on the best international research, of theories and methods used to address such problems, in addition to being able to critically reflect upon this knowledge on a scientific basis.

1.2 Skills
MScs in Global Health will:

- Be able to identify and critically analyse key factors and forces shaping the health and well-being of populations and societies at global, international, regional, national, district and community levels, taking into account both global and local perspectives.
- Be able to plan, collect, analyse and assess qualitative and quantitative health-related data and possess advanced skills to select, combine and prioritize the vast health related data. There will be a focus on using various types of Information
communication technologies for the analysis, such as global and local databases, web based tools, remotely sensed and geo-information systems.

- Independently analyse and evaluate health policies, health systems, and strategies for health promotion and the control and prevention of diseases, particularly in low- and middle-income societies.
- With regard to validity, reliability, applicability and affordability, be able to critically evaluate, discuss and prioritise among scientific literature and key methodologies in the field of global health.
- Communicate and discuss evidence-based knowledge, advice and decisions across cultures and on different levels to researchers, policy makers, media, organizations, and the general public.

1.3 Competencies
MScs in Global Health will be able to:

- Design, carry out and co-ordinate scientifically valid and focused research, and evaluate, validate and disseminate existing data to advance knowledge in a particular problem area or issue of global health.
- Advise on, and formulate effective responses to complex practice and policy issues related to global health.
- Initiate and independently contribute evidence-based planning, communication and realisation of new and innovative initiatives and sustainable strategies to improve health and prevent and control diseases.
- Work effectively with cross-disciplinary problems on an individual basis as well as in teams, and be able to provide evidence-based solutions to situations, which are complex and require new approaches.
- Independently assess and organise their own learning process and assume responsibility for continuous professional development with a view to life-long learning.
- Conduct and communicate research on global health.

Chapter 2. Admission requirements
A maximum of 30 students may be admitted to the programme in the first year (2013) with a projected expansion of up to a maximum of 60 students per year in the following years. One third of the seats may be reserved for students from countries outside of the EU/EEA.

Applicants must have a bachelor's degree in a field relevant to Global Health, possess skills within qualitative and quantitative methods, and prove their English language skills if English is not their mother tongue.

2.1 Method criteria
Applicants must prove that they have:
- Passed courses in Quantitative methods, including statistical methods, equivalent to a minimum of 5 ECTS.
- Passed courses in Qualitative methods equivalent to a minimum of 5 ECTS.
2.2 English language skills
Applicants for whom English is not their first language must submit a document certifying English skills equivalent to Danish high school “Level B” or one of the following language tests: International English Language Testing System (IELTS/Academic) or the Test of English as a Foreign Language (TOEFL). The minimum acceptable score for IELTS is 6 and the minimum acceptable score for TOEFL is 550 on the paper test, 213 on the computerized test, or 79-80 on the internet-based test.

2.3 Motivational Statement
In addition, all applicants must write a motivational statement depicting reasons for applying for admission, how the programme will build on pre-existing knowledge and skills, and describe other relevant experiences.

2.4 Directly qualifying bachelor’s degrees from Danish universities
1) Applicants holding one of the following bachelor’s degrees from a Danish university are exempt from documenting that they meet the admission criteria regarding qualitative and quantitative methods (titles in Danish):
   - Folkesundhedsvidenskab
   - Idræt med specialisering i undervisning og kommunikation
   - Sociologi
   - Geografi
   - Statskundskab
   - Antropologi

2) Applicants holding one of the following bachelor’s degrees from a Danish university are exempt from documenting the admission criteria regarding quantitative methods (titles in Danish):
   - Medicin
   - Odontologi
   - Veterinærmedicin
   - Fødevarevidenskab m. specialisering i ernæring og sundhed

Chapter 3. Programme content

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<thead>
<tr>
<th>ECTS:</th>
<th>7.5</th>
<th>7.5</th>
<th>7.5</th>
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</thead>
<tbody>
<tr>
<td>1st semester</td>
<td>Global Health: Policy, Politics and Partners</td>
<td>Population Dynamics and Drivers of Change in Health</td>
<td>Health and Diseases in Low and Middle Income Societies</td>
<td>Advanced Research Methods and Ethics</td>
</tr>
<tr>
<td>2nd semester</td>
<td>Health Systems in a Global Context</td>
<td>Strategies for Health Promotion and</td>
<td>Field Work (15 ECTS)</td>
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3.1 Content
The programme is set at 120 ECTS-credits. The following course elements are mandatory: All course elements on the first and second semester and Thesis.

After completion of the six course elements and field work during the first year, students must put together an individual study plan for the second year. The third semester of studies allows for choosing to do an elective of 10 or 15 ECTS in combination with elective courses at UCPH or abroad. The fourth semester is for writing the thesis. The individual study plan must reflect the students' specialisation within in one of four of the following study tracks starting in the second year:

1. Policy, Financing and Health Care Systems
2. Disease Burden, Challenges and Changes
3. E-health and ICT in Health
4. Research and Research Communication

3.1.1 Track 1: Policy, Financing and Health Care Systems
The track focuses on components such as health politics and policies, health economics and management, ethics and human rights, minorities and refugees' health, global risk factors and determinants of health. While building on courses from the first and second semester, the courses and activities as well as thesis topic chosen should be related to allow for progression during the third and fourth semester of studies.

3.1.2 Track 2: Disease Burden, Challenges and Changes
The track focuses on improvements and new challenges of health, and the prevention and control of diseases, with emphasis on diseases in low- and middle-income countries and societies. Subjects may include nutrition, water and sanitation, parasitology and other infectious diseases, chronic diseases, climate and environment change, including urbanization, reproductive health including child health, and the impact of demographic and epidemiological transition on health and disease. The courses and activities as well as thesis topic chosen should be related to allow for progression during the third and fourth semester of studies.

3.1.3 Track 3: E-health and ICT in Health
E-health can be defined as 'healthcare practice supported by electronic processes and communication'. The track in E-health and ICT (information and communication technology) in health focuses on strategies for their application in health promotion and prevention as well as in communication between various levels of the health system, and between clients and health professionals. Subjects include advance communication technology, including the use of mobile phones (M-Health) and information collection and management, epidemiological
surveillance, and use of data bases. The courses and activities as well as thesis topic chosen should be related to allow for progression during the third and fourth semester of studies.

### 3.1.4 Track 4: Research and Research Communication

The track provides the students the opportunity to gain in-depth knowledge of research methods and theories at all stages of the research process. Research methods can draw from any discipline of relevance for global health and global health research. The courses and activities as well as thesis topic chosen should be related to allow for progression during the third and fourth semester of studies.

#### Chapter 4. Language

The master programme is conducted in English.

#### Chapter 5. Time limit

Students must complete the programme within three years.

##### 5.1 Special Circumstances

The board of studies may waive the time limit where circumstances warrant it.

#### Chapter 6. Courses and exams

Regulations regarding exams are described in the *General Curriculum Provisions for Bachelor and Master Degrees* found here: [http://sund.ku.dk/for_studerende/studieordninger/](http://sund.ku.dk/for_studerende/studieordninger/)

##### 6.1: Core of external examiners

The Master of Science in Global Health is affiliated with the Board of External Examiners for Master of International Health, Master of Disaster Management, Master of Science in Global Health (Censorkorpset for Master of International Health, Master of Disaster Management, Master of Science in Global Health)

##### 6.2 List of courses and exams

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course title</th>
<th>ECTS</th>
<th>Exam type</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Global Health: Policy, Politics and Partners</td>
<td>7.5</td>
<td>Written 4-hour examination</td>
<td>7-scale Internal examination</td>
</tr>
<tr>
<td>1</td>
<td>Population Dynamics and Drivers of Change in Health</td>
<td>7.5</td>
<td>Written take-home assignment (48 hours)</td>
<td>7-scale Internal examination</td>
</tr>
<tr>
<td>1</td>
<td>Health and Diseases in Low- and Middle-Income Societies</td>
<td>7.5</td>
<td>Oral examination (30 min.) w. preparation (30 min.)</td>
<td>7-scale External examination</td>
</tr>
<tr>
<td>1</td>
<td>Advanced Research Methods and Ethics</td>
<td>7.5</td>
<td>Written take-home assignment (14 days)</td>
<td>7-scale Internal examination</td>
</tr>
</tbody>
</table>
Chapter 7. Descriptions of courses and exams

7.1 Course Name: Global Health: Policy, Politics and Partners
7.1.1 Course Component
Semester: First semester
ECTS: 0
Classification: Not mandatory

Course description:
The course will introduce students to current and emerging global health issues and the hazards and determinants impacting human health and disease, ranging from individual to society. The course will present the concepts of equity and human rights in health as conceptual frameworks for studying international global health policies. Moreover, the international health architecture and the different partners on the global health arena and their politics and (conflicting) interests will be introduced including the changing role of different stakeholders, health policies and political issues. Examples will include trade agreements, economic development, access to care, violent as well as chronic conflicts, and cultural and social factors at local, national, regional, international and global levels. Issues of good governance, particularly international cooperation, political ideologies, problem identification, power studies, agenda setting and organisation analysis will likewise form a substantial part of the course.

Theories and practices concerned with global health policy will be discussed, as will questions
of how international policies, trade agreements, and global public goods concepts affect global health. Medical anthropology and key issues such as equity, the division of resources, and poverty will be discussed. Students will gain knowledge on methods used to search for and evaluate data. They will also be introduced to, and learn to critically evaluate and choose between, a number of data sources which may be used to gather data to analyse global health issues; including accessing local and global databases.

The students will be introduced to the World Health Organisation’s six building blocks to making an efficient health system. The emphasis will not be only on what are the problems and what have been the solutions applied so far, but on identifying the gaps and discussing what could be possible future solutions, given the changing societies.

This part of the course furthermore introduces a health and human rights approach. Human rights are regarded as fundamental to public health work. Human rights abuses can dramatically affect health, health can be dramatically worsened when human rights are ignored, and health and human rights can act synergistically with each other for the improvement of global health. Thus the students will learn about the conceptual foundations of the health and human rights theme and how this framework can be applied in order to better understand and combat health problems in a globalized world including problems of social inequalities in health and inequities in access to health care.

On completion of the course, students should be able to:

- Describe and discuss the concepts of equity and human rights in relation to global health.
- Exemplify knowledge of, and be able to discuss, the international health architecture including the main international actors and global health policies of international organisations and political systems.
- Demonstrate analytical skills through the use of relevant international databases on health and health care.
- Discuss good governance and democracy as well as political ideologies, welfare state systems and citizenship.
- Discuss problem identification, power studies, agenda setting and organisation analysis.
- Illustrate knowledge of organisation analysis and show the ability to discuss problems regarding the political process and agenda setting.

Teaching and learning methods:
The course will include a combination of lectures, student activating sessions and group work. The students will be introduced both to theories and empirical data on all of the course topics.

Prerequisites: None
Mandatory components: None

7.1.2 Exam Component
Exam name: Examination in Global Health: Policy, Politics and Partners
Semester: First semester
ECTS: 7.5
**Classification:** Mandatory  
**Requirements for attending the exam:** None

**To achieve the maximum grade of 12, the student must be able to:**
- In a short and precise manner state his or her knowledge about a topic and present analysis of related problems.
- Describe and discuss the concepts of equity and human rights in relation to global health.
- Exemplify knowledge of, and be able to discuss, the international health architecture including the main international actors and global health policies of international organisations and political systems.
- Identify relevant international databases for obtaining knowledge on policies and outcomes related to global health and demonstrate how to apply them on concrete problems.
- Discuss good governance and democracy as well as political ideologies, welfare state systems and citizenship.
- Discuss problem identification, power studies, agenda setting and organisation analysis.
- Illustrate knowledge of organisation analysis and show the ability to discuss problems regarding the political process and agenda setting.

**Type of examination:** Written examination (4 hours). The students will answer one or more questions and must write 6-8 pages.  
**Grading:** 7-step grade scale  
**Assessment:** Internal  
**Materials permitted:** All, except devices allowing for external communication.  
**To be completed prior to:** Thesis

**7.2 Course Name:** Population Dynamics and Drivers of Change in Health  
**7.2.1 Course Component**  
**Semester:** First semester  
**ECTS:** 0  
**Classification:** Not mandatory

**Course description:**  
This course will enable participants to acquire a thorough knowledge and understanding of population dynamics and drivers of change in health across the globe. Small and large-scale migrations of different types (forced, voluntary, and semi-voluntary) and modalities of resettlement will be examined using appropriate demographic models and tools. Demographic trends will be interpreted through qualitative narratives – including ethnographic methods. The focus of attention will be on health, social systems, and sub-systems nested within larger “Complex Adaptive Systems” (CAS) that form the backbone of dynamic population pyramids. Emphasis will furthermore be on climate change induced alterations of environmental, social and institutional determinants of health and the unequal distribution of the derived health effects among the most vulnerable populations and regions of the world. The course will provide a description of earth systems and human systems linkages and the relationship between changes and variations of climate factors such as temperature, precipitation, and wind and the
respective impacts on human health and health systems in vulnerable population groups in both rural and urban settings.

Course participants will be familiarized with complexity theory as it applies to population dynamics: migration, health, crisis, and transformative change in different parts of the world.

Topics to be explored include: resilience, a key topic of investigation through exploring the realities and challenges of predictable and unpredictable catastrophes associated with climate change and variability, rising sea levels, and loss of arable and/or habitable land causing economic and social vulnerabilities; and armed conflict arising from natural resource exploitations. Course participants will be trained to identify interdisciplinary and innovative approaches to framing, defining, and evaluating key concepts and formulating research questions. This course is designed to provide the participants knowledge and skills that are synergistic with the other courses offered during the first year in preparation for the participants’ direct involvement in research, be it field-based or through library-based desk study.

On completion of the course, students should be able to:
• Describe and discuss international humanitarian policy and practice in response to crisis, migration, adaptation, transformative change, and in building resilience.
• Compare and contrast empirical evidence on the health and demographic ramifications of urbanization, climate change and variability, ageing, and emerging patterns of infectious and non-communicable diseases of global significance.
• Enhance and utilize analytical skills using the tools of demography, anthropology, sociology, and epidemiology to assess case studies and scenarios that call for interdisciplinary ways of problem solving.

Teaching and learning methods:
The teaching methods will include a combination of formal lectures, class and field-based group exercises and problem-based learning, case studies, essay and computer-based (electronic) learning exercises. Journal clubs and blogs will allow students to read, interpret and discuss selected scientific articles and cases. Visits to relevant institutions will expose the students to ‘real-world’ situations, albeit mostly in Denmark.

Prerequisites: None
Mandatory components: None

7.2.2 Exam Component
Exam name: Examination in Population Dynamics and Drivers of Change in Health
Semester: First semester
ECTS: 7.5
Classification: Mandatory
Requirements for attending the exam: None

To achieve the maximum grade of 12, the student must be able to:
• Describe and discuss international humanitarian policy and practice in response to crisis, migration, adaptation, transformative change, and overall resilience.
• Compare and contrast empirical evidence on the health and demographic ramifications of urbanization, climate change and variability, ageing, and emerging patterns of infectious and non-communicable diseases of global significance.
• Enhance and utilize analytical skills using the tools of demography, anthropology, sociology, and epidemiology to assess case studies and scenarios that call for interdisciplinary ways of problem solving.

**Type of examination:** Written take-home assignment (48 hours). The length of the assignment must be 6-8 pages.

**Grading:** 7-step grade scale

**Assessment:** Internal

**Materials permitted:** All

**To be completed prior to:** Thesis

### 7.3 Course Name: Health and Diseases in Low- and Middle-Income Societies
#### 7.3.1 Course Component
**Semester:** First semester

**ECTS:** 0

**Classification:** Not mandatory

**Course description:**
*In this module, global distribution, and burden, of disease and health will be addressed - particularly in relation to vulnerable populations and ages such as women, children, and the elderly.*

Communicable and non-communicable diseases and how they may interact and be addressed, particularly in low- and middle-income countries, will be addressed; as well as injuries and accidents. Living conditions, life styles, major health determinants, and risk factors (including environmental and climate related) will be linked to health and disease. Mental health and physical health, and their relations, will be studied in a cross-disciplinary approach as a preparation for Module V (Health systems).

Principles of screening, diagnosis, treatment and rehabilitation will be studied for some major health problems and diseases, and as an introduction to Module VI (Disease prevention and health promotion). Similarly, principles of hygiene, sanitation, healthy nutrition and living will be studied - in general, for specific health problems, and as an introduction to Module VI.

While the focus will be on major health problems in low- and middle income countries and societies, the advantage of having access to Danish health institutions and registries and databases, as well as international headquarters and institutions in the Copenhagen area, will be drawn upon.

**On completion of the course, students should be able to:**
• Analyse, describe and list current patterns of health and disease globally and by region, with emphasis on low- and middle-income countries. This includes basic knowledge on communicable as well as non-communicable diseases, trauma and injuries, health
related to age and life-stage including reproductive health, and listing principles in health promotion, prevention, treatment and rehabilitation

- Understand and illustrate major risk factors and determinants for health and disease with emphasis on low- and middle-income countries. This includes living conditions; socio-economic as well as environmental conditions; (epi)genetic and cultural determinants; and risk factors such as life-style, substance (ab)use and other health-related exposures. The student must also be able to identify and discuss proven and potential interactions of health problems, and the ‘double’ or ‘triple burden of disease’.

- Analyse and critically examine data on health and disease from low- & middle-income countries and from high-income countries, and discuss and criticize previous and current priorities in global and local health policies, including ‘vertical’ vs. ‘horizontal’ approaches to health interventions.

- Argue for and develop a prediction of patterns of health and major diseases globally beyond 2015, based on emerging and actual changes in climate, environment, demography and wealth, and envisage how health may be impacted.

**Teaching and learning methods:**
Cross-disciplinary teaching and problem-oriented learning will enable the students to work professionally for improving global health, with emphasis on health, diseases and development in low- and middle-income societies. Teaching and learning will be research-based, and highlight areas, which the academic staff and their collaborators are actively researching into in various parts of the world. The teaching methods will include a combination of formal lectures, class and field-based group exercises and problem-related teaching and learning, seminars, case studies, essay and computer exercises. Journal clubs and blogs will allow students to read, interpret and discuss selected scientific articles and cases. Visits to institutions, laboratories, data bases and registers will expose the students to ‘real-world’ situations, albeit mostly in Denmark.

**Prerequisites:** None
**Mandatory components:** None

7.3.2 Exam Component

**Exam name:** Exam in Health and Diseases in Low- and Middle-Income Societies
**Semester:** First semester
**ECTS:** 7.5
**Classification:** Mandatory
**Requirements for attending the exam:** None

To achieve the maximum grade of 12, the student must be able to:

- Analyse, describe and list current patterns of health and disease globally and by region, with emphasis on low- and middle-income countries. This includes basic knowledge on communicable as well as non-communicable diseases, trauma and injuries, health
related to age and life-stage including reproductive health, and listing principles in health promotion, prevention, treatment and rehabilitation

- Describe and explain major risk factors and determinants for health and disease with emphasis on low- and middle-income countries. This includes living conditions; socio-economic as well as environmental conditions; (epi)genetic and cultural determinants; and risk factors such as life-style, substance (ab)use and other health-related exposures.
- Identify and discuss proven and potential interactions of health problems, and the ‘double’ or ‘triple burden of disease’.
- Analyse and critically examine data on health and disease from low- & middle-income countries and from high-income countries, and discuss and criticize previous and current priorities in global and local health policies, including ‘vertical’ vs. ‘horizontal’ approaches to health interventions.
- Argue for and develop a prediction of patterns of health and major diseases globally beyond 2015, based on emerging and actual changes in climate, environment, demography and wealth, and envisage how health may be impacted.

**Type of examination:** Oral exam (30 min.) with preparation (30 min.)

**Grading:** 7-step grade scale

**Assessment:** External

**Materials permitted:** All – excluding devices connected to the internet

**To be completed prior to:** Thesis

7.4 **Course Name:** Advanced Research Methods and Ethics

7.4.1 **Course Component**

**Semester:** First semester

**ECTS:** 0

**Classification:** Not mandatory

**Course description:**

The course uses a problem-based approach to introduce the principal concepts and methodological techniques used in global health research; with a focus on quantitative and qualitative research methods, as well as methods for completion of evidence-based reviews. The aim is to develop the ability of the student to critically discuss, select, and apply the appropriate method(s) for addressing specific research questions in global health, while at the same time respecting international and national regulations and declarations on research in relation to health.

Teaching in quantitative methods will build on the student's pre-requisite knowledge of the basic principles of statistics. The course will cover methods for registry (secondary data) and field-based (primary) data collection - including definition of outcomes and variables; target population; sampling; sample size calculation; and questionnaire design. Central issues on data management, validation, and analyses using statistical software (e.g. SPSS or R) are also covered during the course.
Teaching in qualitative methods will build on the student's existing knowledge of the basic concepts of anthropological and sociological research. In addition, application of qualitative research methods in communication studies and political science related to global health will be taught. The course covers the principal methods for field-based data collection including focus group discussions; key informant interviews; participant observation and oral history; data management; and field note analysis (including use of statistical software).

The course will provide an introduction to the mixed methods approach in terms of the rationale for use, common procedures, and limitations.

The basic methodological approach to evidence-based reviews of health interventions is introduced, including search strategies for secondary data; pre-determined inclusion criteria for eligibility and quality of identified data; specification of outcomes and indicators; as well as narrative and statistical data analysis (including meta-analysis).

In addition, the course covers the basic principles and statutes on research ethics addressing the considerations and challenges of ensuring good research practice at each of the main stages of the research process. An introduction to good clinical and laboratory practice and quality assurance will be given; as well as patients’ rights and privacy issues in relation to health and health research.

**On completion of the course, students should be able to:**

- Design a feasible, as well as ethically valid, research study in global health, focused on how to: identify and formulate a relevant research problem; justify the proposed study; determine the study objectives and appropriate research method(s); collect, manage, and analyse research data and material; ensure respect to, and protection of, human subjects; address study limitations; and interpret and communicate research findings.

- Through critical reading of relevant literature, journal clubs, and discussions of different scientific studies, evaluate the relevance and validity of scientific literature.

**Teaching and learning methods:**
The teaching methods will, among others, include a combination of formal lectures, group exercises and problem-related teaching and learning.

**Prerequisites:** None
**Mandatory components:** None

**7.4.2 Exam Component**

**Exam name:** Exam in Advanced Research Methods and Ethics
**Semester:** First semester
**ECTS:** 7.5
**Classification:** Mandatory

**Requirements for attending the exam:** None

To achieve the maximum grade of 12, the student must be able to:
- Identify and describe relevant research problems in global health, and possess knowledge of general concepts for ensuring good research practice - including ethical statutes and considerations with a special emphasis on low- and middle-income settings.
- Critically discuss and select among relevant research methods in preparation for studies of global health problems. This includes quantitative and qualitative research methods, as well as a mixed methods approach.
- Collect, manage, and analyse qualitative and quantitative data on health and disease using appropriate analytical and statistical methods. The student must also be able to use relevant software to store, manage, and analyse both primary and secondary research data.
- Identify and critically evaluate the relevance and validity of scientific literature and data. The student must also be able to interpret and create systematic reviews with emphasis on health interventions targeting major global health problems.
- Design a feasible, as well as ethically valid, research study in global health with a special emphasis on low- and middle-income health problems.

**Type of examination:** Take-home assignment (14 days). The length of the assignment must be 9-15 pages, excl. appendixes.

**Grading:** 7-step grade scale

**Assessment:** External

**Materials permitted:** All

**To be completed prior to:** Thesis

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7.5 Course Name: Health Systems in a Global Context

7.5.1 Course Component

**Semester:** Second semester

**ECTS:** 0

**Classification:** Not mandatory

**Course description:**

Health systems are core social institutions with a vital role in reducing suffering and illness, and promoting health. This course introduces students to health systems in high-, middle-, and low-income societies in a historical, cultural, organizational, economical, and political context. The course will enable students to critically analyze and evaluate central aspects of health systems, e.g. health policies and priority settings; access to health care; equity in health care provision; and health care planning and management. A number of topics will be covered, including management and organizations of health systems, the anthropology of health systems; health information systems; strengthening of health systems; models of purchasing and providing health care; health insurance; and issues in service delivery such as quality of care and human resource challenges, as well as health services for profit and non-profit. Students will learn about the frameworks and methods employed in the evaluation of health systems.

**On completion of the course, students should be able to:**

- Describe, explain, and discuss the overall global political, cultural, and economic factors influencing the organization of health systems in high-, middle-, and low-income societies.
• Identify and discuss the role of the different stakeholders at international, national and local levels.
• Describe and discuss the most common health financing models and their implications for the different groups of end-users and the overall quality of care.
• Critically evaluate central (selected) aspects of health systems for prevention and disease control from an equity perspective.
• Develop and present a substantiated analysis of selected aspects of health care systems based on case studies and/or critical reading of articles.

Teaching and learning methods:
Different pedagogical approaches will be used during the module:
• Formal lectures by selected teachers followed by discussions
• Group assignments (both small class-room assignments as well as home-work assignments)
• Case-work and Student presentations

Prerequisites: None
Mandatory components: None

7.5.2 Exam Component
Exam name: Exam in Health Systems in a Global Context
Semester: Second semester
ECTS: 7.5
Classification: Mandatory
Requirements for attending the exam: None

To achieve the maximum grade of 12, the student must be able to:
• Formulate and study a relevant research problem based on the themes presented at the course.
• Develop and present a substantiated analysis of selected aspects of health care systems based on case studies and/or critical reading of articles.
• Critically discuss the selected aspect/s in a global context

Type of examination:
The exam will be a project assignment on a subject of the student’s own choice consisting of a short written assignment covering one or more central thematic aspects of the course. Length: max 16,000 characters incl. spaces. The report can be written individually or in groups of up to four people. For group reports 4,000 characters incl. spaces per extra group member.

Grading: 7-step grade scale
Assessment: External
Materials permitted: All.
To be completed prior to: Thesis

7.6 Course Name: Strategies for Health Promotion and Disease Prevention
7.6.1 Course Component
Semester: Second semester
ECTS: 0  
Classification: Not mandatory

Course description:
The purpose of the course is to introduce students to the strategies and theories of disease prevention and health promotion, including health communication in different settings, and to train the students in planning and evaluating interventions in low-, middle- and high-income countries. The students should be trained in including the skills achieved in the previous courses.

Students will be introduced to methods used for health education, as well as tools and skills necessary to provide health promotion and disease prevention services to individuals, families, groups, and communities. There will be a focus on the functioning of actors and decision makers as well as health care systems and its interaction with the population and other sectors of society (e.g. NGOs, water suppliers, the agricultural sector, etc.) in the wider socio-political context.

Topics include health information, health management, mass interventions health technology assessment, and screening programmes for major health problems (how they are communicated, understood, and made cost effective), gendered health and public health ethics.

Skills will be acquired in communicating evidence-based knowledge, advice, and decisions across cultures and on different levels to policy decision makers, media, organizations, as well as population groups – using a range of tools and strategies and through different media. Health impact assessments (HIA) will be introduced as a participatory tool in planning for sustainable development.

The students will be introduced to strategies to reduce social inequalities in health in low-middle- and high-income countries, as well as criteria for evaluating effects of interventions and prevention strategies.

They will also be trained in planning activities to counteract a major global health problem by identifying primary stakeholders and barriers to changes that might improve health.

On completion of the course, students should be able to:

- Describe and discuss central theories of prevention and health promotion - including theories on health behaviour, empowerment, planning, intervention, and communication.
- Describe and discuss significant national and international prevention and health promotion programs and strategies to counter essential health problems.
- Compare and recommend methods which may change relevant individual risk factors (downstream solutions) and societal conditions (upstream solutions) in high- middle- and low income societies.
- Identify and critically discuss strategies to reduce social inequalities in health in high-middle- and low income societies.
• Critically evaluate health promotion through the health impact assessment (HIA) as a participatory tool in planning for sustainable development - utilizing HIA processes and methods.
• Critically analyze evidence criteria for evaluating the effects of interventions.
• Develop a proposal for planning a prevention and health promotion activity to counteract a given health problem or evaluating effects of interventions based on case studies and/or critical reading of articles.

Teaching and learning methods:
The course will include a combination of lectures, student activating sessions and group work based on an assignment with supervision. The students will be introduced both to theories and empirical material on all the course topics. The students will also be trained in finding and reading scientific articles.

Prerequisites: None
Mandatory components: None

7.6.2 Exam component
Exam name: Exam in Health Promotion and Disease Prevention
Semester: Second semester
ECTS: 7.5
Classification: Mandatory

Requirements for attending the exam:
The exam will consist of an oral exam based on a report, which must be handed in seven days prior to the oral exam. Questions for the report are handed out seven days prior to that deadline.

To achieve the maximum grade of 12, the student must be able to:
• Describe and discuss central theories of prevention and health promotion -including theories on health behaviour, empowerment, planning, intervention, and communication.
• Describe and discuss significant national and international prevention and health promotion programs and strategies to counter essential health problems.
• Identify and critically discuss strategies to reduce social inequalities in health in high-middle- and low income societies.
• Critically evaluate health promotion through the health impact assessment (HIA) as a participatory tool in planning for sustainable development - utilizing HIA processes and methods.
• Critically analyze evidence criteria for evaluating the effects of interventions.

Type of examination:
Assessment is based on an oral exam (30 min.; no preparation) based on a report (max. 6 standard pages/14,400 characters incl. spaces), which has been drawn up during the classes
and forms the basis for the examination. The report must be handed in seven days prior to the oral examination.

Group exam: The report may be worked out individually or in groups consisting of up to four students, in which case the oral exam may also be carried out in a group. The report will be assessed as a group product, and the oral examination will be assessed individually. The report counts 67% and the oral examination count 33% of the grade.

For group reports two pages extra per extra group member. The oral group examination will be extended with 15 minutes per extra student (i.e. 2 students: 45 min, etc.)

Grading: 7-step grade scale
Assessment: External
Materials permitted: All.
To be completed prior to: Thesis

7.7 Course Name: Field Work
7.7.1 Course Component
Semester: Second semester
ECTS: 0
Classification: Not compulsory

Course description:
The course is in two parts: a theoretical and a practical part. The theoretical part takes place at the University of Copenhagen, while the practical part takes place abroad. The preparation in Copenhagen will deal with how the knowledge and skills acquired in the previous six mandatory modules will be put to use when going on the field trip. In addition, the students will be preparing themselves for the departure to their field destination.

For the practical part the students will be going on a field trip to a destination in a low- or middle income society in order to study a health system in a different setting. Staff from the University of Copenhagen will accompany the students and give lectures and supervision during the field trip. In addition, guest lecturers from a local institution will participate in the teaching and supervision of the field work. The students will be divided into groups and will work on a health topic relevant for the field trip setting. Students must take daily notes of their experiences and reflections made during their field stay.

At the end of the module, students must write up a field report based on the group work, but including the individual student’s reflections on the project and field stay. The field report should document the work process reflected in the objectives listed below:

On completion of the course, students should be able to:
- Identify and formulate a relevant and realistic research problem within global health.
- Identify and formulate relevant objectives.
- Find, discuss and evaluate relevant scientific literature in relation to the project
- Choose the appropriate study methods (qualitative/quantitative/literature review).
- Discuss limitations and ethical issues related to the completed field study.
Teaching and learning methods:
Teaching and learning will highlight areas, which the academic staff from the University of Copenhagen, as well as the local partner institution and other collaborators, are actively researching into in various parts of the world. The teaching methods will include a combination of formal lectures, class and field-based group exercises, and problem-related learning.

Prerequisites: None
Mandatory components: None

7.7.2 Exam Component
Exam name: Field Report
Semester: Second semester
ECTS: 15
Classification: Compulsory
Requirements for attending the exam: None

To pass, the student must be able to:
Hand in a field report, which documents the field work process, including demonstrating the ability to:
- Identify and formulate a relevant and realistic research problem within global health.
- Identify and formulate relevant objectives.
- Find, discuss and evaluate relevant scientific literature in relation to the project
- Choose the appropriate study methods
- Discuss limitations and ethical issues related to the completed field study.

Type of examination: Project Assignment (Field report)
Grading: Pass/Fail
Assessment: Internal
Materials permitted: All
To be completed prior to: N/A

7.8 Elective courses and internship
The third semester consists of 30 ECTS elective studies. The elective studies can comprise of elective courses, taken at KU or a tertiary institution (either in Denmark or overseas), or a combination of elective courses and an internship. The student must be prepared for changing a selected elective study if the course is not offered when expected.

7.8.1 Elective Course(s)
Elective courses must cover global health disciplines. The assessment of elective modules is organized as described in individual course descriptions in accordance with their associated faculties. Elective courses are graded based on individual course descriptions and external or internal examiners may be used.
7.8.1.1 Course Component

Course name: Elective Course  
Semester: Third semester  
ECTS: Varies – according to the institution and course(s) chosen  
Classification: Not mandatory  
Course description: Varies – according to the institution and course(s) chosen  
On completion of the course, students should be able to: Varies – according to the institution and course(s) chosen  
Teaching and learning methods: Varies – according to the institution and courses chosen  
Prerequisites: Must be approved by the board of studies  
Mandatory components: None  

7.8.1.2 Exam Component  
Exam name: Elective Course  
Semester: Third semester  
ECTS: Varies – according to the institution and course(s) chosen  
Classification: Mandatory – if student is enrolled in an elective course  
Requirements for attending the exam: Varies – according to the institution and course(s) chosen  
To achieve the maximum grade of 12, the student must be able to: Varies – according to the institution and course(s) chosen  
Type of examination: Idem  
Grading: Idem  
Assessment: Idem  
Materials permitted: Idem  
To be completed prior to: Thesis  

7.8.2 Internship  

7.8.2.1 Course Component  
Course name: Internship  
Semester: Third semester  
ECTS: 0  
Classification: Not mandatory  
Course description:  
The student must design a protocol and plan for the internship, which must be accepted by the supervisor as well as the company/organization/institution and/or local authority that will host the intern. The purpose of the course is to allow the students to gain knowledge of the assignments and conditions at workplaces relevant to the MSc in Global Health, and to give them the opportunity to apply theoretical knowledge on global health in practice.  
On completion of the course, students should be able to:  
  • Critically discuss and evaluate projects, programs, policies and other interventions or issues in relation to global health.
• Describe the assignments and conditions encountered during the internship and reflect on their internship experience, utilizing the knowledge, skills and competencies acquired during the programme.

**Teaching and learning methods:**
Those acquired in previous courses and practical work, but at this stage integrated and applied on concrete working situations with companies, organizations/institutions and/or local authorities.

**Prerequisites:**
• Passed exams in at least 30 ECTS of the mandatory exams.
• An internship contract signed by all relevant parties: A written agreement between the student, the faculty supervisor and the host company/organization/institution and/or local authorities, where the internship is to take place.

**Mandatory components:**
A work plan developed prior to commencement of the internship, working under supervision in the field, office, or archive, with a project or program related to global health. Milestones for skills and specific competences may be used, according to position, placement and project. Development of competence cards may be considered.

**7.8.2.2 Exam Component**

**Exam name:** Internship Exam  
**Semester:** Third semester  
**ECTS:** 10 or 15  
**Classification:** Mandatory  
**Requirements for attending the exam:** Passed exams in at least 30 ECTS of the mandatory exams.

**To achieve the maximum grade of 12, the student must be able to:**
• Describe the type of work/project carried out during internship, including the conditions thereof.
• Explain and discuss the knowledge and competencies within global health that the student has used in connection with the internship.
• Apply theoretical knowledge on global health in practice. Critically discuss and evaluate projects, programs, policies or other interventions or issues in relation to global health.
• Draw perspectives of present work for future career and practice, including for research.

**Type of examination:** Project assignment  
**Grading:** 7-step grade scale  
**Assessment:** External censorship  
**Materials permitted:** All  
**To be completed prior to:** Thesis
7.9 Course Name: Thesis
The Master's thesis concludes the MSc programme.

7.9.1 Course Component
Semester: Fourth semester
ECTS: 0
Classification: Not mandatory

Course description:
Writing of a master thesis. The master's thesis documents that the student is able to independently select and apply scientific theories and methods in order to address and analyse a limited subject with a global health perspective. The Master's Thesis is the final assignment of the Master's programme. The objective is to give the student an opportunity to use the acquired knowledge independently in a major assignment.

On completion of the course, students should be able to:
- Identify scientific problems related to global health issues and possess knowledge, based on the highest international research.
- Demonstrate knowledge of theories and methods used when addressing such problems, as well as critically discuss and prioritise among the relevant methods.
- Demonstrate knowledge on the highest international research within the field of global health, and be able to critically reflect upon this knowledge on a scientific basis.
- Critically evaluate the scientific literature and key methodologies within the field of global health with regard to validity, reliability and applicability.
- Evaluate, validate and disseminate existing data and design, carry out and co-ordinate scientifically valid and focused research to further advance knowledge on a particular problem area or issue in relation to global health.
- Assess the extent to which the production and interpretation of results/material depend on the selected theory/method and the selected delimitation.
- Make clear and scientifically based conclusions in relation to problem formulation and, more generally, in relation to the overall problem and the subject area.
- Discuss theories/models from the basis of an organised set of values and with a high level of independence.
- Assess the scientific and societal impact of the thesis from an ethical viewpoint.
- Demonstrate the ability to conduct research in global health.

Teaching and learning methods:
Independently writing a master thesis under the supervision of a supervisor from the Faculty of Health and Medical Sciences at the University of Copenhagen.

Prerequisites: Passed all the exam components in the first and second semester.
Mandatory components: None

7.9.2 Exam Component
Exam name: Thesis
Semester: Fourth Semester
ECTS: 30
Classification: Mandatory

Requirements for attending the exam:
Completion of all previous programme requirements.

To achieve the maximum grade of 12, the student must be able to:
- Identify scientific problems related to global health issues and possess knowledge, based on the highest international research.
- Demonstrate knowledge of theories and methods used when addressing such problems, as well as critically discuss and prioritise among the relevant methods.
- Demonstrate knowledge on the highest international research within the field of global health, and be able to critically reflect upon this knowledge on a scientific basis.
- Critically evaluate the scientific literature and key methodologies within the field of global health with regard to validity, reliability and applicability.
- Evaluate, validate and disseminate existing data and design, carry out and co-ordinate scientifically valid and focused research to further advance knowledge on a particular problem area or issue in relation to global health.
- Assess the extent to which the production and interpretation of results/material depend on the selected theory/method and the selected delimitation.
- Make clear and scientifically based conclusions in relation to problem formulation and, more generally, in relation to the overall problem and the subject area.
- Discuss theories/models from the basis of an organised set of values and with a high level of independence.
- Assess the scientific and societal impact of the thesis from an ethical viewpoint.
- Demonstrate the ability to conduct research in global health.

The thesis must be prepared in accordance with the approved thesis agreement and must contain a summary not exceeding one page. The summary must sum up the thesis problem, the methods applied, the main results, and contain a discussion and conclusion. The summary forms part of the overall assessment of the master’s thesis.

At the assessment of the master’s thesis, both the academic contents and the student’s ability to convey such contents will be taken into consideration.

Type of examination: Project assignment.
Grading: 7-step grade scale
Assessment: External
Materials permitted: All
To be completed prior to: The master thesis is the final exam.