

# Master of Science in Public Health (specializing in Global Health)

*This programme description is valid for students admitted in the academic year 2017/2018. It was approved by the Faculty of Medicine and Health Sciences on 21 March 2017.*

## **Facts about the Programme of Study**

Programme code: MSPUHE

Webpage: [www.ntnu.edu/studies/mspuhe](http://www.ntnu.edu/studies/mspuhe)

Title of the degree: Master of Science in Public Health

ECTS credits: 120

Duration: Two years (four semesters)

Host Faculty: Faculty of Medicine and Health Sciences

Host Department: Department of Public Health and Nursing

## **Introduction**

The Master of Science (MSc) in Public Health, specializing in Global Health, provides an in-depth study of global health, focusing on various aspects of health in low and middle income countries including cultural understanding and how development, policy, environment and climate influences health. Furthermore, it aims to focus on development, implementation and analysis of socio-technological innovations in global health, to meet complex health challenges and improve overall health outcomes.

Given the strength of NTNU in engineering and technology, this is the first master's programme in Norway to integrate global health with innovations in the past, present and future.

The degree awarded to students completing the programme of study will be Master of Science in Public Health.

The MSc in Public Health is administered by the Department of Public Health and Nursing at the Faculty of Medicine and Health Sciences.

## **Learning Outcome**

### General learning outcome:

The graduated student should be able to analyze important global health problems, inequity, and how to contribute to addressing these challenges including through capacity building of research and education.

### Specific learning outcomes:

Knowledge: the student will be able to

- demonstrate knowledge of global health problems, predominantly in low- and middle income countries;
- describe maternal, newborn, child, adolescent and sexual health and rights;
- understand epidemiology, theoretical research models and research ethics;
- explain the UN Sustainable Development Goals and their importance in improving global health;
- understand how health policies are developed, analyzed and used;
- understand the need and the future of technological innovations in global health development;

- identify and understand ecological factors influencing health.

Skills: the student will be able to

- work in interdisciplinary teams;
- formulate accurate research questions and write a project protocol;
- use quantitative and qualitative research methods;
- critically value when to use different research method;
- plan, collect data, analyze, synthesize material, present results orally and written;
- critically read, interpret and discuss scientific literature;

General competence: the student will have developed

- competence in global health and different ways to address this;
- experience of incentives and barriers to improvements;
- awareness of interrelations between health, cultural, social, ecological and political dimensions;
- utilization of technology as innovation in health managements;
- communication of global health issues.

### **Target Groups and Admission Requirements**

The MSc in Public Health specializing in Global Health is suitable for students who are motivated to develop a theoretical base in health and health systems, and appreciate an emphasis on methodology and training in different research methods.

There will also be a special emphasis on innovation and technological support and services in global health

Admission to the MSc in Public Health requires a bachelor's degree (or an equivalent 3-year higher education) in Health, Development Studies, Sport Sciences, or in Technology/Engineering subjects with relevance for health care. Other relevant disciplines may be accepted after an individual evaluation of the applicant's qualifications.

International applicants need to submit proof of English proficiency (TOEFL, IELTS, APIEL or University of Cambridge test). More details about the language requirements are available at [www.ntnu.edu/studies/langcourses/languagerequirements](http://www.ntnu.edu/studies/langcourses/languagerequirements)

Applicants who are not citizens of the European Union (EU) or the European Economic Area (EEA) need to provide a financial guarantee to get a residence permit in Norway.

### **Teaching Methods and Learning Activities**

The teaching includes lectures and seminars. All students must participate in group work and have individual assignments. The language of instruction and examination is English.

### **Compulsory HSE Training**

All master's students must participate in compulsory Health, Safety and Environment (HSE) training. This includes a HSE lecture and a fire protection course, both held in the first two weeks of the semester. When these activities have been completed, the student must pass an electronic test. This is to be done by 1 September 2017. If the student fails to do so, the access card to the campus/hospital buildings will be withdrawn.

## Programme Structure

The master's programme is made up of the following two components:

- Compulsory courses (60 credits)
- Master's thesis (60 credits)

### Compulsory Courses

KLH3002	Epidemiology I	7.5 credits	Autumn
PH3000	Global Health	15 credits	Autumn
PH3001	Qualitative Research Methods	7.5 credits	Autumn
PH3002	Innovation in Global Health	7.5 credits	Spring
PH3003	Statistical Methods in Public Health Research	7.5 credits	Spring
PH3004	Health Policy	7.5 credits	Spring
Various codes	Experts in Teamwork – Interdisciplinary Project	7.5 credits	Spring

The course *Experts in Teamwork* (EiT) is compulsory for all master's degree students at NTNU, and is taught every Wednesday in the second semester. Read more about EiT at [www.ntnu.edu/eit](http://www.ntnu.edu/eit)

### Master's Thesis

PH3901	Thesis in Global Health	60 credits
--------	-------------------------	------------

The student must have passed all examinations in compulsory courses before she/he can submit the master's thesis. The deadline for submission of the thesis is 1 June in the fourth semester.

### Model of the MSc in Public Health specializing in Global Health

Year 1		Year 2	
<i>1<sup>st</sup> semester (autumn)</i>	<i>2<sup>nd</sup> semester (spring)</i>	<i>3<sup>rd</sup> semester (autumn)</i>	<i>4<sup>th</sup> semester (spring)</i>
KLH3002	PH3002	PH3901	
PH3000	PH3003		
	PH3004		
PH3001	EiT		

### Innovation and Entrepreneurship

The Master of Science in Public Health supports NTNU's strategy concerning innovation and entrepreneurship as students will learn and understand the need for and the future of technological innovations in global health development.

Technology and innovation are integral parts of healthcare. Through the course PH3002 (Innovation in Global Health), the students gain an in-depth understanding of global health technologies, trajectories, bottlenecks in implementation, as well as experience working in teams. Group work will focus on a single technology in an early stage of development. The students are required to present a forecast for the future of the technology, useful to improve global health in terms of a pathway to implementation. Students will analyze whether the given technology will be sustainable, what are the potential barriers and what needs to change in the technology for it to be highly successful.

## **Course Descriptions**

The course descriptions are available at [www.ntnu.edu/studies/courses](http://www.ntnu.edu/studies/courses)