

SCHOOL OF PUBLIC HEALTH

DOCTOR OF PHILOSOPHY IN PUBLIC HEALTH

With Concentrations in

- Biological, Environmental and Occupational Health
- Biostatistics
- Epidemiology
- Health Policy Planning and Management
- Population, Family and Reproductive Health
- Social and Behavioural Science

INTRODUCTION

The School of Public Health was established in 1994 in response to a growing demand for a cadre of public health practitioners who will provide leadership in public health practice as well as increase the public health workforce. The school has been running a three year full-time research-based PhD programme since 2003. Evaluation of the PhD programme suggests that candidates wish to be provided with advanced tuition in their respective concentrations due to the cross-disciplinary and diverse nature of public health.

The programme seeks to prepare future faculty members for successful academic careers; Mastery of research tools and analytical skills in the chosen specialty to conduct large scale research; provide students with an in-depth knowledge and expertise in their areas of specialization and acquire the relevant skills to conduct independent study in public health.

ADMISSION REQUIREMENTS

A Masters degree (MPH/MPhil or its equivalent) in a relevant Public Health area is required.

DURATION OF PROGRAMME

The duration of the PhD Programme is a minimum of four (4) years (48 calendar months) full time and six (6) years part-time.

GRADUATION REQUIREMENTS

Course work	18-24 (9-12 credits per semester)
Seminars (I,II,III&IV)	12
Thesis	45 credits
	75-81 credits

Degree to be Awarded

Candidates will be awarded PhD degrees in specialized areas as specified below:

- Doctor of Philosophy in Public Health
 - a. Biological, Environmental and Occupational Health
 - b. Biostatistics
 - c. Epidemiology

- d. Health Policy Planning and Management
- e. Population, Family and Reproductive Health
- f. Social and Behavioural Science

STRUCTURE OF PROGRAMME (Biological, Environmental and Occupational Health)

YEAR 1

Semester 1: Core Courses

Course Code	Course Title	Credit
GSPH 701	Advanced Data Analysis in Public Health	3
GSPH 703	Leadership in Public Health	3
BEOH 705	Statistical Methods in Environmental and Occupational Health	3

Semester 2

<i>Electives (students will be required to take 6 - 9 credits)</i>		
BEOH 702	Advances in Infection and Immunity	3
BEOH 704	Applied Human Ecology and Sustainability	3
BEOH 706	Advanced Environmental Health	3
BEOH 708	Advanced Occupational Health	3
BEOH 712	Environmental and Health Impact Assessment	3
YEAR TWO, THREE & FOUR		
BEOH 710	Seminar I	3
BEOH 720	Seminar II	3
BEOH 730	Seminar III	3
BEOH 740	Seminar IV	3
BEOH 700	Thesis	45

STRUCTURE OF PROGRAMME (Biostatistics)

YEAR 1

Semester 1: Core Courses

Course Code	Course Title	Credit
GSPH 701	Advanced Data Analysis in Public Health	3
GSPH 703	Leadership in Public Health	3
BSTT705	Biostatistics in Public Health	3

Semester 2

<i>Electives (students will be required to take 6 - 9 credits)</i>

BSTT 702	Analysis of Multiple Failure-Time Survival Data	3
BSTT 704	Analysis of Binary Repeated Outcome	3
BSTT 706	Quantitative Research Methods in Public Health	3
YEAR TWO, THREE & FOUR		
BSTT 710	Seminar I	3
BSTT 720	Seminar II	3
BSTT 730	Seminar III	3
BSTT 740	Seminar IV	3
BSTT 700	Thesis	48

STRUCTURE OF PROGRAMME (Epidemiology)

YEAR 1

Semester 1: Core Courses

Course Code	Course Title	Credit
GSPH 701	Advanced Data Analysis in Public Health	3
GSPH 703	Leadership in Public Health	3
EPDC705	Design and Analysis of Epidemiological Studies	3

Semester 2

<i>Electives (students will be required to take 6 - 9 credits)</i>		
EPDC 702	Emerging Issues in Epidemiology	3
EPDC 704	Practice and Management of Clinical Trials	3
EPDC 706	Systematic Reviews and Meta-analysis of Epidemiological Studies	3
YEAR TWO, THREE & FOUR		
EPDC 710	Seminar I	3
EPDC 720	Seminar II	3
EPDC 730	Seminar III	3
EPDC 740	Seminar IV	3
EPDC 700	Thesis	48

STRUCTURE OF PROGRAMME (Health Policy, Planning and Management)

YEAR 1

Semester 1: Core Courses

Course Code	Course Title	Credit
GSPH 701	Advanced Data Analysis in Public Health	3

GSPH 703	Leadership in Public health	3
HPPM705	Emerging Issues in Health Policy and Management	3

Semester 2

<i>Electives (students will be required to take 6 - 9 credits)</i>		
HPPM 702	Health Systems & Policy Analysis	3
HPPM 704	Health Systems Evaluation	3
HPPM 706	Monitoring and Evaluation in Public Health	3
YEAR TWO, THREE & FOUR		
HPPM 710	Seminar I	3
HPPM 720	Seminar II	3
HPPM 730	Seminar III	3
HPPM 740	Seminar IV	3
HPPM 700	Thesis	48

STRUCTURE OF PROGRAMME (Population, Family and Reproductive Health)

YEAR 1

Semester 1: Core Courses

Course Code	Course Title	Credit
GSPH 701	Advanced Data Analysis in Public Health	3
GSPH 703	Leadership in Public health	3
PFRH705	Adolescent Health and Development: Issues, Programs, and Policies	3

Semester 2

PFRH 702	Applied Demography in Public Health	3
PFRH 704	Critical issues in Population and Reproductive Health	3
PFRH 706	Evidence-Based Population and Reproductive Health Programmes	3
PFRH 708	Innovative Interventions in Women's Health	3
PFRH 712	Nutrition for Public Health Programming	
YEAR TWO, THREE & FOUR		

PFRH 710	Seminar I	3
PFRH 720	Seminar II	3
PFRH 730	Seminar III	3
PFRH 740	Seminar IV	3
PFRH 700	Thesis	48

STRUCTURE OF PROGRAMME (Social and Behavioural Science)

YEAR 1

Semester 1: Core Courses

Course Code	Course Title	Credit
GSPH 701	Advanced Data Analysis in Public Health	3
GSPH 703	Leadership in Public health	3
SOBS705	Qualitative Research Methods in Social and Behavioural Science	3

Semester 2

<i>Electives (students will be required to take 6 - 9 credits)</i>		
SOBS 702	Critical Issues in Social and Behavioral Sciences	3
SOBS 704	Contemporary Issues in Health Promotion and Education	3
SOBS 706	Cultural Epidemiology	3
SOBS 708	Medical Anthropology	3
SOBS 712	Social and Behaviour Change Communication	3
YEAR TWO, THREE & FOUR		
SOBS 710	Seminar I	3
SOBS 720	Seminar II	3
SOBS 730	Seminar III	3
SOBS 740	Seminar IV	3
SOBS 700	Thesis	48

DESCRIPTION OF COURSES

GSPH 701 ADVANCED DATA ANALYSIS FOR PUBLIC HEALTH

This module will provide students with practical skills to analyze quantitative data arising from large, population-based datasets, including household surveys and qualitative data. The quantitative data analysis emphasis is on the demonstration of the effects of incorporating the weights and the data structure on the analysis. The strategy for conducting a preliminary analysis of a large-scale, complex survey will be discussed. For each analysis, some theoretical and practical considerations required for the survey data will be discussed and also multiple imputation for non-response. Data handling skills are given equal emphasis to analysis skills. Procedures covered include merging, re-shaping and collapsing data files. For qualitative data analysis topics will cover code development, development of descriptive themes and code patterns from qualitative data, thematic analysis, data triangulation, and use of compilation sheets, matrix for summarizing and presenting data.

GSPH 703 LEADERSHIP IN PUBLIC HEALTH

The Leadership in Public Health Course provides skills in health leadership, management and governance. The topics include examining classical and contemporary theories and concepts of leadership, principles and characteristics of governance in health, strategic management approaches, networking and advocacy, health management information systems policies, legal frameworks and ethical issues and case studies. The curriculum is benchmarked on the six building blocks of the health system and more specifically on the leadership and governance component.

BEOH 702 ADVANCES IN INFECTION AND IMMUNITY

This course aims at integrating current cutting edge research knowledge of important infectious diseases and their relationship to the immune system. The course will combine up-to-date theoretical modules and practical skills training. The course covers new strategies to combat microbial, viral and parasitic infections, infectious diseases and laboratory diagnosis of infectious diseases, introduction to molecular techniques and molecular mechanisms *in vitro* and *in vivo*, immunity- the human response to infections including innate immunity, adaptive immunity, allergy, immune evasion, anergy, immunodeficiency states and autoimmunity, advanced topics in infection and immunity-will include biological interactions between hosts and pathogens with particular emphasis on understanding the impact of these interactions on detection and treatment.

BEOH 704 APPLIED HUMAN ECOLOGY AND SUSTAINABILITY

The course covers genetic, physiological, and social adaptation to the environment and to environmental change; the role of social, cultural, and psychological factors in the maintenance or disruption of ecosystems; effects of population density on health, social organization, or environmental quality; new adaptive problems in urban environments; interrelations between technological and environmental changes; mal-adaptations in man's biological and cultural evolution; food quality and quantity in physical and intellectual performance, demographic change; computers, remote sensing devices, and other new technologies in sustainable development.

BEOH 705 STATISTICAL METHODS IN ENVIRONMENTAL & OCCUPATIONAL HEALTH

This course covers methods for estimating environmental consequences on human health, environmental change, measurement and impact on health, environmental modeling, methodological designs, limitations and common errors, environmental interventions, biometry, environmental and occupational health data collection and analysis. Other areas covered by the course include, integration of environmental and health data into GIS, strategies for export of environment and health data across interfaces, the exploration of spatial data using spatial frailty and random effects models, scan statistics, geographically weighted regression (GWR) models, Crigging, spatial analysis using GeoDa and other new spatial analytic tools.

BEOH 706 ADVANCED ENVIRONMENTAL HEALTH

The course will provide a range of theoretical skills and practical knowledge to graduates. The course covers; ecosystem theory, ecosystem services and their functions, water supply and sanitation, environmental determinants of health (physical, biological, chemical and the mode of transmission, including social/economic determinants), sources of environmental pollution/contamination and control both man-made and natural, environmental toxicology (toxin sources, distribution, and bioaccumulation, e.g., pesticides, metals, solvents, radioactive isotopes, food additives, etc), estimating environmental consequences on human health, environmental change, measurement and impact on health, environmental modeling, methodological designs, limitations and common errors, environmental interventions, energy and health.

BEOH 708 ADVANCED OCCUPATIONAL HEALTH

This course will provide an opportunity for students to develop skills to understand the dynamic relationship between work and health, while generating new ideas and knowledge. The course covers the following areas: methods in occupational epidemiology, physiology of work and occupational ergonomics, systematic review, risk assessment and management, principles of toxicology, occupational safety practice, disability management, management and control of occupational hazards, health and workability, principles and methods in occupational hygiene, social and behavioural aspect of occupational health, occupational health practice, biological hazards, scientific communication for health professionals, and special seminars.

BEOH 712 ENVIRONMENTAL AND HEALTH IMPACT ASSESSMENT

This course will provide an opportunity for students to develop skills in assessing complex environment and health systems. It covers, the concept of environmental and health impact assessment; scenario building; issue framing – challenges in issue framing, defining assessment questions and the health outcomes (psychosocial outcomes), consulting with stakeholders, formulating scenarios, scoping the assessment, selecting indicators; designing the assessment – key issues in the design process, screening, piloting, protocol development; execution – managing the assessment, modeling the causal chain, impact analysis, uncertainty analysis; and the appraisal of assessment – reporting assessment results, comparing and ranking outcomes as

well as emphasis on democracy, equity, sustainable development, scientific and robust practice and a holistic approach to public health.

BSTT 702 ANALYSIS OF MULTIPLE FAILURE-TIME SURVIVAL DATA

This module is intended for students who wish to acquire analytic skills for analyzing data arising from time-to-occurrence studies when two or more events (failures) occur for the same subject. Topics to be covered are: unordered failure events of the same type, unordered failure events of different types, the Andersen-Grill model, the marginal risk set model, the conditional risk set model (time from entry), and the conditional risk set model (time from the previous events).

BSTT 704 ANALYSIS OF REPEATED BINARY OUTCOMES

This module is intended for students who wish to acquire analytic skills for analyzing the development of a dichotomous outcome variable over time. Topics to be covered include: Generalised estimating equations (GEE), random coefficient analysis, correlation structures, comparison between GEE analysis and random coefficient analysis, alternative models, and longitudinal imputation method for dichotomous missing data.

BSTT 705 BIOSTATISTICS IN PUBLIC HEALTH

This module allows students to apply biostatistics in public health analysis. Topics include techniques for statistical inference including the distinctions between population and sample, types of data, analysis of continuous, binary, and count data within the concept of sampling distributions, stratification and interaction. Also covers robust statistical methods including permutation procedures, the bootstrap, and the sandwich estimators of errors, and rank-based methods: Wilcoxon and Mann-Whitney tests; Spearman rank correlation.

BSTT 706 QUANTITATIVE RESEARCH METHODS IN PUBLIC HEALTH

The focus of the course is to provide doctoral students in public health with the theoretical, methodological and practical skills needed to engage in high level scientific quantitative research. The key course objective is to prepare students for independent research using quantitative research. Students will be challenged to address issues encountered by public health researchers during design, conduct and field implementation of quantitative research. Considerable emphasis will be placed on problem identification, measurement of variables, including operationalization of concepts, theories, models and development of scales. Other topics to be covered include questionnaire construction, data collection and research ethics.

EPDC 702 EMERGING ISSUES IN EPIDEMIOLOGY

The Emerging Issues in Epidemiology discuss emerging and reemerging infectious diseases, changing patterns of disease in low and middle income countries including non-communicable diseases, control and elimination and eradication of infectious diseases, pharmaco-epidemiology,

geospatial analysis, genetic epidemiology, climate change and its impact on endemic diseases and modeling of epidemiological studies, ethics in epidemiological research

EPDC 705 DESIGN AND ANALYSIS OF EPIDEMIOLOGICAL STUDIES

The Design and Analysis of Epidemiological Studies course examines; the design, conduct and in-depth analysis of ecological studies, cross sectional studies, case control studies, cohort studies, randomized trials and cluster randomized trials. Topics will cover advanced discussions disease measurement, causality in epidemiology, analytical procedures, determination of risk factors including assessment of confounding and interaction, survival analysis, modeling quantitative outcome variables, binary outcome data, follow-up data and meta-analysis.

EPDC 704 PRACTICES AND MANAGEMENT OF CLINICAL TRIALS

The course examines the practice and management of clinical trials. The topics will include the principles of clinical trials, the role of observational studies, randomization, the use of blinding and placebos, size of trials, monitoring trial results, reporting trial results, multiplicity of data, regulatory legislation and associated approvals and permissions required to conduct high-quality national and international clinical trials, explore ways of implementing Good Clinical Practice, explore good laboratory practice in trial settings and establish quality control and assurance systems.

EPDC 706 SYSTEMATIC REVIEWS & META-ANALYSIS OF EPIDEMIOLOGICAL STUDIES

This course will provide a detailed description of the systematic review process, discuss the strengths and limitations of the method, and provide step-by-step guidance on how to actually perform a systematic review and meta-analysis. Specific topics to be covered include: formulation of the review question, searching of literature, quality assessment of studies, data extraction, meta-analytic methods, assessment of heterogeneity and report writing. The course will also cover statistical issues such as selection of statistical models for meta-analysis, practical examples of fixed and random effects models, best evidence syntheses (qualitative systematic reviews) as well as methods to evaluate heterogeneity and publication bias.

HPPM 702 HEALTH SYSTEMS AND POLICY ANALYSIS

This course provides an understanding of different theories and models of health systems and policy analysis. The topics include critical analysis of the policy framework (context, actors, processes and content) in public policy development, stakeholder analysis related to health in developing countries. It also emphasizes how to use this understanding to improve the process of public policy, program development for health and strengthening the design and implementation of health policy and systems research.

HPPM 704 HEALTH SYSTEMS EVALUATION

This course provides a practical guide to conducting monitoring and evaluation of health systems, and reporting the results to support decision-making. The topics include concepts and measurement of health system indicators, identifying and reviewing existing health system indicators, monitoring and evaluation of health system frameworks, tools and methods for monitoring and evaluation of health systems, monitoring and evaluation report writing skills.

HPPM 705: EMERGING ISSUES IN HEALTH POLICY AND MANAGEMENT

This course is intended to provide knowledge and expose students to the development and philosophical paradigms applicable to business and health care organisations/research, institutions focusing on practices that shape health policy and the management of health services. Students would also be introduced to emerging issues facing healthcare managers and policy makers taking a critical look at concerns about access and quality of care in health institutions. Specific topics include: understanding management research, business strategy, knowledge management, responsive healthcare marketing for public service, relationship marketing, community field theory, social policy and new institutional sociology.

Wilkinson, K.P. (1991). *The community in rural America*. Westport, CT: Greenwood Press.

PPM 706 MONITORING AND EVALUATION IN PUBLIC HEALTH

The course will provide students with analytic skills and competencies needed in monitoring and evaluation of public health interventions and programmes. The topics in this course will include: programme monitoring planning, classification evaluation, development of effective evaluation strategies, analytic frameworks, development of effective and innovative indicators, use of indicator reference sheet, data sources, evaluation designs, data collection approaches, ethics in M&E, incorporation of M&E into strategic planning, communication and utilization of M&E findings and report writing.

PFRH 702 APPLIED DEMOGRAPHY IN PUBLIC HEALTH

This course is designed to take students through the methods and techniques of data collection, evaluation of the quality and utilization of demographic data for health policy. In addition to the design and implementation of survey research, the course will equip students with the skills of analysis and estimation of measures of disease frequencies, estimation of rates and draw on concepts of population estimation and projection for disease forecasting. The course also covers the use of DALYs and YPLLs in assessing population health. Finally, students will be taken through life table and survival techniques for modeling disease processes. The course will also cover estimates for planning public health interventions.

PFRH 704 CRITICAL ISSUES IN POPULATION AND REPRODUCTIVE HEALTH

This course will serve to get students to become familiar with key contemporary issues in the area of Population and Reproductive Health. At the end of the course students will be able to

discuss and critically analyze emerging and cutting edge topics that are central to the specialty. Topics to be covered include family planning, fertility determinants, population and community health, women's reproductive health, maternal morbidity and mortality, abortion, adolescent health, maternal and child nutrition, nutrition transition and obesity and male health issues. The issue of globalization and donor funding in reproductive health will also be discussed.

PFRH 705 ADOLESCENT HEALTH AND DEVELOPMENT: ISSUES, PROGRAMS AND POLICIES

This course focuses on the major public health issues of adolescents globally, with particular emphasis on those in the global south. The course will explore major theories and research on adolescent development. It will also analyze programmes, policies, and environments that improve or hurt the health and wellbeing of adolescents. Additionally, the course will assess risk and protective factors as well as resilience during the developmental processes while providing insights on reproductive health interventions. At the end of the course, students will be expected to have a thorough understanding of the issues affecting adolescents' sexual and reproductive health and development. They will also be able to determine research priorities for adolescent sexual and reproductive health and design cutting-edge interventions for healthy adolescent growth and development.

PFRH 706 EVIDENCE-BASED POPULATION AND REPRODUCTIVE HEALTH PROGRAMMES

Designing and implementing interventions for positive behaviour change has become a central objective of public health. The course emphasises the use of relevant evidence, theories and concepts in public health programming. This advanced course moves beyond the understanding of theories and models and focuses on the selection and operationalization of behavioural theories and models in the development, implementation, management and evaluation of population and reproductive health interventions with emphasis on social, cultural, political, economic and ethical contexts. Other topics include the appraisal of evidence and evidence-based decision-making with reference to the practical aspects of strategic planning for health behaviour change and behaviour maintenance.

PFRH 708 INNOVATIVE INTERVENTIONS IN WOMEN'S HEALTH

This course will serve to get students to learn how to design interventions in the area of women's reproductive health. The course will be based on the standard definition of reproductive health and will also examine non-reproductive health issues that are peculiar to women. The issues to be considered include reducing maternal morbidity and mortality, increasing modern contraceptive use, prevention of unsafe abortion, cervical cancer prevention, breast cancer prevention, prevention of obesity and hypertension.

PFRH 712 NUTRITION FOR PUBLIC HEALTH PROGRAMMING

This course will provide students with knowledge and competencies needed to incorporate nutrition into public health policies and programs across the entire lifecycle. Students will learn how nutrition programming can be implemented in different settings including communities, health facilities, churches, workplaces, schools, and recreational and sports centers. Topics to be covered will include situation/landscape assessment, policy analysis and development, designing interventions, community engagement, nutrition governance, nutrition transitions, evaluating nutrition programs, and food system changes.

SOBS 702 CRITICAL ISSUES IN SOCIAL AND BEHAVIORAL SCIENCES

This course will focus on social, behavioral and psychological factors and processes in the etiology and prevalence of disease in health-care-seeking behavior, disease prevention, long-term care and rehabilitation. The course will aim at exposing students to current research on health knowledge, attitudes and beliefs; social and psychological factors in disease etiology; risk reduction; and cultural influences in public health, including cross-cultural and multilevel studies.

SOBS 704 CONTEMPORARY ISSUES IN HEALTH EDUCATION AND PROMOTION

This course uses theories and models in health education and promotion and its application to health behaviors conducive to optimal health in individuals, groups and communities in current health research and interventions. Students will be exposed to current research on health education and promotion, with particular focus on social, psychological, environmental and ecological theories and models of health and health behavior, design and evaluation of multifaceted intervention programs and patient-provider communication and education.

SOBS 705 QUALITATIVE RESEARCH METHODS IN SOCIAL AND BEHAVIOURAL SCIENCE

This course seeks to provide students with skills needed to conduct research that focuses on perspectives, values, opinions, behaviors, in the social contexts of particular populations. Topics include advanced qualitative methods and methodological approaches to conceptualizing, designing and conducting qualitative research in public health, use of ethnography, symbolism, phenomenology and the grounded theory approaches to data collection and analysis, the use of social science paradigms in understanding qualitative research, and hands-on experience with various qualitative methods and analysis techniques (software) to interpret primary or secondary qualitative data.

SOBS 706 CULTURAL EPIDEMIOLOGY

Cultural epidemiology investigates socio-cultural features of illness, their distribution, and their impact on behaviour and public health. This course harnesses the power of complementary epidemiological orientations for effective health research. Topics include history of cultural epidemiology, theoretical underpinnings of cultural epidemiology, main methodological issues, illness explanatory models, uses of cultural epidemiology for health research, application of cultural approaches to the health of populations and sub-populations, and current debates in cultural epidemiology.

SOBS 708 MEDICAL ANTHROPOLOGY

This course explores disease and cross-cultural influences on disease manifestation and attitudes towards health and illness, traditional, allopathic and orthodox medicines, and includes issues of health, healing, disease and illness in a range of cultures; and the roles of ethnicity and gender in influencing disease profiles and illness experience and how illnesses are managed. Different forms of social and cultural analyses will be applied to a range of local and regional case studies for students to gain an understanding of the key theoretical approaches to the anthropological study of medical knowledge, systems and practices.

SOBS 712 SOCIAL AND BEHAVIOR CHANGE COMMUNICATION

This course will employ global, regional and local best practices for communicating preventive health behavior to individuals, groups and communities. It aims to meet the continuing challenges posed by evolving health issues through the use of appropriate approaches, and will strengthen the capacity of individuals and organizations to plan, implement, evaluate and manage programs, thus ensuring sustained local knowledge and skills.

SEMINARS

BEOH 710, BSTT 710, EPDC 710, HPPM 710, PFRH 710, SOBS 710 SEMINAR I

Students will be required to develop and present their proposal in their respective fields at a seminar to be organised periodically. Students will be assisted by faculty in the development of the proposal.

BEOH 720, BSTT 720, EPDC 720, HPPM 720, PFRH 720, SOBS 720 SEMINAR II

Students will be attached to projects so as to tap the research experiences of Principal Investigators (experiential learning). Students will then present the worth of knowledge and experiences acquired over the period and how this will impact on their research.

BEOH 730, BSTT 730, EPDC 730, HPPM 730, PFRH 730, SOBS 730 SEMINAR III

The seminar aims at ascertaining the progress of students. This will afford the school the opportunity to track students' progress on the course.

BEOH 740, BSTT 740, EPDC 740, HPPM 740, PFRH 740, SOBS 740 SEMINAR IV

Students will present their theses. This will consist of the question they sought to address, findings and recommendations.

DETAILS OF EXPERIENTIAL LEARNING

Attachment to a Research Project

The School of Public Health has faculty members who have either worked on research projects which have generated existing secondary datasets or are currently engaged in research projects. Some of these projects are:

- **Women's Health Study of Accra:** This project has collected two waves of data on a representative sample of women on Accra and has a combined dataset available. Students who work on this project will gain skills in formulating research questions based on questionnaires from previously conducted studies. They will also learn how to design an analysis plan to answer their research questions
- **Ghana Essential Health Intervention Project (Ga East District):** This is an ongoing intervention study exploring the concept of an urban Community Health Planning System (CHPS). Students involved in this study will learn how to go about primary data collection. They will also learn how to use qualitative methods in research. There will also be opportunity to formulate research questions and address these from analysis of secondary data
- **Evaluation of the Mobile Technology for Community Health (MOTECHE) intervention:** This is an ongoing quasi experimental study which is examining the effect of a health intervention on maternal health outcomes. Students who work on this project will learn how to design impact assessment studies. They will be involved in data collection, data analysis and secondary analysis of data.
- **Ghana Prisons HIV Survey:** This study was a nationwide assessment of HIV risk factors and prevalence in Prisons in Ghana. The study has resulted in a data set which students can use for study. Students will learn how to formulate research questions and come up with an analysis plan to answer the questions.
- **In depth effectiveness and safety studies for antimalarials (INESS):** This epidemiological study collected data on the effectiveness of anti-malarials. The study is currently in the phase of data analysis and paper writing. Students involved in this study will learn how to design an analysis plan for questions that go with a particular study. They will learn how to analyse quantitative and qualitative data and how to write research reports.

Faculty members at the school also have access to publicly available datasets such as the Ghana Demographic and Health Survey, Ghana Maternal Health Survey and the Multiple Indicator Cluster Survey.

Students whose PhD work involves quantitative analysis will work with faculty members to develop research questions which will be answered through analysis of the datasets. Students will also spend some time on ongoing research projects where they will work on data collection, data entry and where possible data analysis.

The School has also entered into agreements with collaborators from the New York University Global Institute for Public Health and Southampton University for faculty members from these schools to also make datasets available for students to work on and for these faculty members to provide mentorship for students.

Attachment to Public Health Agencies

The School of Public Health has existing relationships with Ghana Health Service, Ministry of Health, Ghana Statistical Service, Family Health International, World Health Organization, UNICEF and UNFPA. Some of the units within the Ghana Health Service where our students will have attachments are the Navrongo and Dodowa Research Centres and the Policy Planning Monitoring and Evaluation Division. Students will spend some part of Year 2 at these agencies where they will participate in ongoing projects and work on some aspects of health policy analysis.

Teaching Experience

Each student will assist a faculty member in teaching one course at the undergraduate or Master level. The student will give lectures under the supervision of the faculty member and will also give tutorials and help in the grading of examinations.

Collaborations

Southampton University and New York University Global Institute for Public Health are willing to receive students from the School of Public Health to do attachments during which they will work directly with their mentors and will also be allowed to take courses if necessary. The Healthcare Innovations Technology Laboratory which partners with the school in the MOTTECH project is also willing to receive our PhD students for internships during which the students will work on ongoing projects.