

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI,  
GHANA**



**SCHOOL OF PUBLIC HEALTH**

**COLLEGE OF HEALTH SCIENCES**

**CURRICULUM FOR THE**

**MASTER OF PUBLIC HEALTH/ MASTER OF PHILOSOPHY DEGREE IN  
HEALTH SYSTEMS RESEARCH AND MANAGEMENT (HSRM)**

**6<sup>TH</sup> AUGUST, 2017**

1. **NAME OF PROGRAMME:** MASTERS IN HEALTH SYSTEMS RESEARCH AND MANAGEMENT.

2. **DURATION OF PROGRAMME:** TWO (2) YEARS

3. **DEGREE(S) TO BE AWARDED:**

- a. MPhil HEALTH SYSTEMS RESEARCH AND MANAGEMENT.
- b. MPH HEALTH SYSTEMS RESEARCH AND MANAGEMENT (For Health Professionals who may so prefer).

4. **DEPARTMENT:** HEALTH POLICY, MANAGEMENT AND ECONOMICS

5. **FACULTY:** SCHOOL OF PUBLIC HEALTH

6. **COLLEGE:** HEALTH SCIENCES

## 7. INTRODUCTION

Achieving universal health coverage requires every effort to strengthen health care systems and improve health policy developments. This implies enhancing individual, institutional and infrastructural capacity in health systems and policy research to conduct rigorous assessments of the performance of health systems. Particularly in African countries however, the resources, actors and institutions generating and translating knowledge into improving the performance of health systems are limited. In Ghana, the efforts of existing institutions involved in health systems research and management related activities usually do not have sufficient time, resources and personnel with the adequate capacity. Notably, there are usually no particular specialized institutions specifically mandated to conduct research and/or teaching in health systems research and policy analysis. Furthermore, the medical, social, and ethical implications of the production, diffusion and use of health technology for health care is not thoroughly examined, especially in the era of technological applications in health.

**Philosophy:** The Health Systems Research and Management (HSRM) master's programme will be a scientific research-oriented training and networking programme dedicated to support the development and strengthening of the capacity for health systems research and management, particularly in Ghana, but also more generally in sub-Saharan Africa. The

course aims to promote innovative health policy developments across all sectors, and in the African region, with international comparisons. This will be achieved by adopting a multidisciplinary approach to policy analysis that examines medical, economic, social, and ethical implications of the production, diffusion and use of health technology for health care. There will be two tracks; MPhil and MPH. As it aims to promote innovative health policy developments across all sectors, and in the African region, with international comparisons, it will adopt a multidisciplinary approach to policy analysis that examines medical, economic, social, and ethical implications of the production, diffusion and use of health technology for health care. The courses and contents of the MPhil/MPH HSRM programme are developed using interdisciplinary approaches, theories and practices, and reflect health systems and policy developments from national, regional and international perspectives. The MPhil/MPH degree programme is purposefully designed and oriented towards the needs of students from especially Ghana, Africa and also those who intend to work in the African region. The programme will train health managers, practitioners, researchers and other public health professionals of diverse disciplines and backgrounds at various levels of governmental, quasi-governmental, non-governmental, public, and private. Staff of international organizations and in different settings, who would be responsible for assuring the quality of care and provision of services, improving capacity of providers, developing efficient payment mechanisms, prioritizing resources to the poor, improving information systems, and strengthening health system governance will also benefit from the training. In order to meet the challenges and changing demands of public health determinants as well as preventive, promotive and curative medicine for health systems, the programme structure accommodates a diversity of backgrounds relevant to public health professionals. The core courses provide an avenue for the integration of academic training with professional practice.

### **Overview and Structure of the MPH/MPhil HSRM programme**

Table 1 below provides an overview of the delivery of the master's programme, which will require full-time studies for a duration of two years or four semesters. Year one of the programme comprises of two semesters of formal teaching activities. KNSUT-School of Public Health will teach on a regular weekly schedule (indicated in blue, see Table 1 below), while TU Berlin's Department of Health Care Management will deliver three (3) block courses in Semester I and another three (3) block courses in Semester II. These six block courses will also run as short courses (earning certificates) and will be open to middle-to-high level personnel who may only require short-term training in these specific areas of interest to complement their competencies.

Year two focuses on individual student research project activities with close supervision and mentoring. It consists of practical project work in subject-related institutions in Ghana or abroad, leading to the writing of a master's thesis (or its equivalent academic research paper). For each cohort, three selected students will have the opportunity to embark on a three-month study visit to Germany for similar project work activities and exchanges hosted by the TU Berlin partner. For the completion of the programme and in partial fulfilment of the requirements for the award of the MPhil/MPH degree, students are required to submit a thesis or its equivalent based on an independent scientific research project in a topic relevant to the course of health systems and policy developments, especially in Ghana or elsewhere in Africa.

Table 1: Programme for Course Delivery

Teaching		Year 1 Semester I (August - December)												
		wk1	wk2	wk3	wk4	wk5	wk6	wk7	wk8	wk9	wk10	wk11	wk12	wk13
KNUST	5 Courses													
TUB	3 Courses													
		Year 1 Semester II (January - May)												
KNUST	4 Courses													
TUB	3 Courses													
Supervision		Year 2 Semester I (August - December)												
KNUST/ TUB	Project work													
		Year 2 Semester II (January - May)												
KNUST/ TUB	Master's thesis													

\*KNUST = KNUST-School of Public Health

\* TUB = TU Berlin's Department of Health Care Management

\*wk = week

## 8. JUSTIFICATION OF THE PROGRAMME:

The KNUST-School of Public Health, which grew out of the Department of Community Health of the School of Medical Sciences, has been very active in teaching, research and service to the community, with the vision of becoming the most competitive centre of excellence and preferred destination for public health training, research and community service in the sub-region. The School is committed to developing highly qualified public health professionals with varied backgrounds and expertise who will manage and lead the health sector in most efficient and effective manner.

With funding support by the German Academic Exchange Service (DAAD) from the budget of the Federal Ministry of Economic Cooperation and Development

(BMZ) as part of the DAAD-PAGEL programme, the Department of Health Policy, Management and Economics, KNUST-School of Public Health in partnership with the Department of Health Care Management at the Berlin University of Technology (TU Berlin) – which is also the WHO Collaborating Centre for Health Systems Research and Management – has developed the curriculum for the MPhil/MPH Health Systems Research and Management programme. It is a dedicated effort to train individuals, develop expertise and strengthen institutional capacity in health systems research and management in Ghana and in Africa.

Institutions that are involved in health care systems management need well-resourced and well-trained personnel who meet the expected level of knowledge and skills in health systems research and management to support the health sector and promote evidence-informed health policy developments. Health systems researchers and managers should have a comprehensive understanding of the transformational changes that health care systems are undergoing. In addition, researchers and managers should have (among other things) a thorough knowledge of the core components of the health care system in order to facilitate informed decision making about the necessary policies and programmatic responses. Health systems professionals will learn the different approaches to the organization and delivery of health services for improvement in detail, which is very much needed especially in Ghana where, for example, the introduction of a national health insurance has since brought a new set of challenges for the health care system.

## **9. GENERAL OBJECTIVE**

At the end of the training programme, students will be equipped with the knowledge, skills and competencies to be able to assess and identify innovative ways of improving the performance of national health care systems towards the attainment of universal health coverage and other related developmental goals using evidence based policy initiatives.

### **SPECIFIC OBJECTIVES:**

At the end the MPhil/MPH in Health Systems Research and Management, the graduates should be able to:

- Demonstrate an understanding of the techniques required in researching and evaluating health systems for strategic planning, management and leadership.
- Apply various concepts, methods and strategies of organizing, financing, regulating and delivering healthcare services.
- Demonstrate an understanding of the fundamental role of the main actors in the health system focusing predominantly on the institutional frameworks, processes, contents and implementation of health and health care policies.
- Appropriately reflect contexts and advancements in health systems research and management, and consolidate important research findings for training and education.

#### **10. EMPLOYMENT OPPORTUNITIES:**

There is a broad spectrum of opportunities for graduates of this programme to be employed and/or establish themselves as entrepreneurs at all levels of the health system and within the health market. Graduates – as health managers, researchers, experts and consultants – will be competent in macro-level health systems organization, financing and management; health policy management and governance; data generation and management; health planning; policy analysis, evaluation and development; economic evaluation of health programmes and technologies; comparison of international health systems and policies; entrepreneurship; communication-skills in presentation and writing, lobbying and advocacy. The demand for these competencies and skills cuts across:

- Governmental organizations (e.g. Ministry of Health, Ghana Health Service)
- Formidable health associations (e.g. Christian Health Association of Ghana)
- Research institutions (e.g. USAID Health System, Ghana Statistical Service)
- Schools of Public Health
- Health industry (e.g. consultancies, start-ups)
- International organizations (e.g. WHO, UNICEF, World Bank)
- NGOs, local and international (e.g. World Vision, Care International, Core)
- Bilateral Donors (e.g. USAID, GiZ, UKaid)
- International labour market

## **11. ENTRY REQUIREMENTS:**

To qualify to read the MPhil/MPH Health Systems Research and Management programme, the applicant should have a good first degree (at least 2<sup>nd</sup> class lower), for example a BSc, BA, preferably in any public health related field from a recognized university that offers degrees in programmes such as: Statistics/biostatistics; biology; medicine or other health related sciences; political science or economics; sociology or related social sciences.

In addition, applicants should have at least two years post-graduation work/job experience. Relevant international work experience is an advantage and applications by international students are also encouraged. Interested applicants with less than two years working experience but with other relevant background are encouraged to apply.

Applicants should also have a proof of English language proficiency for admission to a research or higher degree programme, if applicant's first language is not English and/or does not qualify for exemption from the required English language test (TOEFL/IELTS).

The final selection will be done on the basis of a written examination followed by an interview (in person or online).

### **Student intake:**

The KNUST-School of Public Health is equipped to handle twenty-five (25) students each year. All lectures will take place at the KNUST-School of Public Health while field/project work will take place at various sites of public health interest in Ghana and abroad.

**Intake for work-related Modules:** The Health Systems Research and Management programme will be innovative in respect of the training needs of health professionals and other civil servants who require tailor measured programmes to enhance work output. In this respect, six (6) courses will be run as interactive short modular courses for a duration of two (2) weeks for interested applicants.

**Graduates of Schools of Public Health:** Graduates of Schools of Public Health from other post-graduate public health programmes who may be interested in pursuing the MPhil/MPH Health Systems Research and Management programme may be considered for admission, with exemption from the common courses already registered and passed, but shall be required to complete a research work related to this current programme in

addition to the other mandatory core courses.

## 12. ASSESSMENT REQUIREMENTS:

Students will be assessed in the theory-based courses through a systematic approach of continuous assessments (including class participation and attendance) that will be carried out throughout each semester. Continuous assessments will make up 30% of the final semester grade while the end of semester examination takes up 70%.

## 13. REQUIRMENT FOR GRADUATION:

This shall be in accordance with the KNUST's requirements as contained in the University Statutes and the regulations of the School of Research and Graduate Studies. For the award of MPhil/MPH Health Systems Research and Management (MPhil/MPH HSRM), the student must have obtained a minimum of 82 credit hours including the submission and successful defence of a written dissertation. CWA requirement will be 55 or above.

## COURSE DESCRIPTION:

### MPhil/MPH Health Systems Research and Management

#### Year 1, Semester I

Course Code	Course Title	Credit Hours		
		T	P	C
	<b>CORE</b>			
COH 711**	Epidemiology & Management Information Systems I	2	3	3
COH 721**	Human Resource for Health	2	0	2
COH 723**	Health Systems Research I	2	3	3
COH 725**	Principles of Management	2	0	2
COH 737**	Biostatistics I	2	3	3
HSRM 551*	Health Care Systems - Goals, Functions, Actors	3	0	3
HSRM 553*	Health Systems Financing	3	0	3
HSRM 555*	The Ghana Health System: Institutions, processes, policies I	2	0	2
	<b>Total</b>	<b>18</b>	<b>9</b>	<b>21</b>

**Note: T = Theory P = Practicals C = Credit**



**MPhil/MPH Health Systems Research and Management**

**Year 1, Semester II**

Course Code	Course Title	Credit Hours		
		T	P	C
	<b>CORE</b>			
COH 712**	Epidemiology & Management Information Systems II	2	3	3
COH 720**	Health Economics	2	0	2
COH 724**	Health Systems Research II	2	3	3
COH 738**	Biostatistics II	2	3	3
HSRM 556*	The Ghana Health System: Institutions, processes, policies II – Industrial visits & Interactions	0	3	1
HSRM 558*	Health Care Industry (with Seminar on Medical Devices)	2	3	3
HSRM 562*	Innovations in Chronic Disease Care and eHealth	3	0	3
HSRM 564*	Health Technology Assessment	3	0	3
	<b>Total</b>	<b>16</b>	<b>18</b>	<b>21</b>

**Note: T = Theory P = Practicals C = Credit**

**\*\* \*\***

**MPhil/MPH Health Systems Research and Management**

**Year 2, Semester I**

Course Code	Course Title	Credit Hours		
		T	P	C
	<b>MANDATORY</b>			
COH 742**	Workshops/Seminars	0	6	2
HSRM 651	Field Applications in HSRM	0	21	7
HSRM 653	Colloquium and Master's Research and Thesis	0	36	12
	<b>Total</b>	<b>0</b>	<b>63</b>	<b>21</b>

**Note: T = Theory P = Practical C = Credit**

**MPhil/MPH Health Systems Research and Management**

**Year 2, Semester II**

Course Code	Course Title	Credit Hours		
		T	P	C
	<b>MANDATORY</b>			
COH 742**	Workshops/Seminars	0	6	2
HSRM 654	Colloquium and Master's Research and Thesis	0	36	12

	<b>Total</b>	<b>0</b>	<b>42</b>	<b>14</b>
(OPTIONAL) ELECTIVES				
COH 728**	Health Education II	2	3	3
COH 864**	Leadership for Health Systems Transformation	1	6	3
COH 718**	Quality Assurance	1	3	2
COH 842**	Hospital Administration	2	0	2

**Note: T = Theory                  P = Practice                  C = Credit**

**\* The courses marked with asterisks will be run as short modular courses to enable interested professionals at work to participate**

**Note: \*\* All the Courses with the COH codes are undergoing code review to be consistent with the KNUST standards, and would be changed accordingly in due course.**

### **Teaching and learning strategies:**

The study content will be delivered mainly within the first two semesters in Year 1 at the KNUST. Small group work, problem-solving exercises, case studies, tutorials and coaching, student-led seminars, workshops, (block) lectures, discussions and peer-reviewed sessions would be used as and when appropriate.

## **14. DESCRIPTION OF COURSE CONTENT**

### **YEAR ONE – SEMESTERS 1 & II**

#### **Core courses:**

#### **COH 711, 712: Epidemiology and Management Information Systems I & II (6 Credits)**

This course aims at providing the quantitative basis for public health policy. The main focus of epidemiology is the distribution, frequency and determinants of health problems and disease in populations. It also provides an introduction to methods, and considers the phenomenon under study in the context of the epidemiological transaction, a profound change in disease and demographic patterns with consequences for health policy and planning.

#### **Content:**

Definition; Concepts and uses of Epidemiology; Measurement of health status; Morbidity and mortality - indices used; Rates standardization; Concept of disease causation, cause and effect relationship; Epidemiology and disease prevention.

Epidemiological methods - descriptive, analytic and experimental/ interventional studies; Statistical applications in epidemiology; Evaluation of diagnostic tests - screening; Natural

history and prognosis; Evaluation of treatment effectiveness; Environmental and occupational epidemiology, clinical epidemiology; Relationship between epidemiology and policy development; Meta-analysis – qualitative and quantitative meta-analysis; Design and use of Health Management Information Systems – the current health information management system (CHIMS and DHIMS) of the Ghana Health Service; Principles of information management, management information cycle; Managing health information systems; Use of information.

### **COH 720: Health Economics (2 Credits)**

An introduction to basic concepts in economics and finance, and their application to the health sector will be discussed. The focus will be on demand and supply for health care, sources of financing health care and methods of economic evaluation in health –cost-effectiveness and cost-benefit analyses.

#### **Content:**

Introduction to economics; Types of economies; Introduction to public finance; Economic evaluation methods; What is economic evaluation - the different types of economic evaluation; Measuring costs of health care; Case studies in costing; Non-monetary measures of health effects - DALYs and QALYs; Monetary measures of health effects; Case studies in measuring health effects; Practical steps in conducting an economic evaluation; Economic evaluation as a framework for decision making; Using decision trees in economic evaluation; Case studies of economic evaluations; Transaction cost economics; Phamarco-economics.

### **COH 721: Human Resource for Health (2 credits)**

Human resource for health (HRH) is important for the smooth delivery of health services. This course is intended to equip students with basic human resource principles needed for effective management of health staff. It focuses on the processes and procedures for obtaining the requisite staff, nurturing, developing and retaining them to give their maximum effort to achieve the goals of the health sector.

#### **Content:**

Definitions, history, scope and concepts of Human Resource management; The nature and development of Human Resources; Management theories; Management and team development; Individual, groups and organization; Team management theories, delegation, authority and responsibility; Planning and organization of Human Resource; Objective setting, standard setting and performance management; Organizational objective; Determining effective employment; Training and development of Human Resources; Determining vacancy, considering sources, preparing and publishing information, processing and assessing applications, notifying applicants and recruitment; Reward and retention of employees - job evaluation, pay benefits, conditions of service, motivation and communication; Employees relations - unitary & pluralistic, trade unions; Human Resource for health crisis; Human Resource management in a changing environment

### **COH 723,724: Health Systems Research I & II (6 Credits)**

This is a research methods course which aims at introducing the student to the multidisciplinary approach to research in health enabling participants to acquire skills of designing and conducting research in health and health-related issues. It also offers an opportunity for students to enhance their expertise in research by applying appropriate research techniques to issues under study. Routine data collection, ability to analyze health data with appropriate statistical techniques and report writing will be stressed. Seminars will be organized on a variety of topics, which will include student contributions as well as lectures, by senior health personnel and academic staff from outside the main teaching staff. Visits to areas of public health interest and health administration will be organized throughout the course.

#### **Content:**

Definition and concepts; Multidisciplinary approach to health research; Types, designs and methods of research studies - quantitative and qualitative study approaches; Survey instruments; Sample size determination – study population and sampling techniques; Issues in research design - validity, reliability, precision, accuracy, repeatability; Conceptual and logical frameworks; Hypothesis formulation and testing; Research questions, aims and objectives; Bias, confounding variables; Scales of measurement; data collection techniques and tools; Analysis of large health service data sets; Ethical issues in health systems research; Synopsis and proposal writing skills; Managing research; Literature critique and review – citation and referencing; Dissemination – presentation skills, scientific writing.

### **COH 725: Principles of Management (2 Credits)**

This course seeks to create awareness in students about the general principles and functions of management and leadership qualities, how to motivate employees for superior performance and how to improve organizational performance. The historical development and origin of management precepts and concepts, management theories and their application to health-related problems are thoroughly discussed. The course prepares health managers and situates health structure in the general management levels; strategic, tactical and operational. The contemporary dynamics in management and their relevance to the realization of health goals such as Sustainable Development Goals are also elaborated.

#### **Content:**

The definition, nature, role and scope of Management; Recognizing the interdisciplinary approach of Management; Relationship between Management and administration; Elements/functions of Management as perceived by different Management authorities; Understanding Management/organizational theory and highlighting the different schools of thought - scientific, human relations, systems contingency among others; Goals of business organizations - economic and social responsibilities of Management; The importance of decisions in the Management process; Meaning and types of Management decisions; Basic processes in decision making models and/or techniques of making decisions; Interpersonal and group processes/group dynamics and its relevance to organization psychology; The application of the theories, skills and concepts such as leadership, motivation, communication, moral, organizational climate - their implications for managing people and organizations; Managing stress including self- and time-management; Reasons/causes of change in individuals and organizations; Strategies for effecting change/ innovation; Analysis

of causes for change/innovation; Failures in organizations; Models for the establishment of appropriate managing of change/innovation. Contemporary dynamics in management and their role in the realization of health goals.

### **COH 737, 738: Biostatistics I & II (6 Credits)**

This course aims at enabling the students acquire the skills of collecting, analysing, interpreting and reporting data on health and health-related issues. Practical problems relating to the use of routine data sources would be discussed. The link between statistics and health management information systems would be stressed. Limitations to qualitative data analysis in health would be examined. Laboratory exercises would be used to ensure competency in the use of statistical software such as STATA, SPSS, EPI Info, Excel, Minitab, SAS and Nvivo.

#### **Content:**

Types of data; Data entry skills, creation of data entry screens and databases; Descriptive statistics; Data presentation; Measures of central tendency; Measures of dispersion; Normal distribution; Probability; Test of significance; Levels of confidence; Regression; Correlation; Statistical association; Application of appropriate statistical methods in epidemiological studies - descriptive, analytical, experimental; Multivariate analysis; Analysis of variance; Logistic regression; Interpretation of statistical results; Evaluation of chance; Bias and confounding; Computer software applications.

### **HSRM 551: Health Care Systems - Goals, Functions, Actors (3 Credits)**

Health care systems are complex and usually not well understood. The aim of the course is to enable students to systematically understand, analyse and evaluate health systems in different countries of the world. The course will introduce the main frameworks, concepts, and ideas of international health systems research to lay the theoretical foundations for students to work in this field. In addition, it will use the theoretical concepts to illustrate and analyse the functioning of health systems in different regions of the world.

#### **Content:**

The course provides a structured overview of the main building blocks and goals of health systems, following the health systems framework of the World Health Organization (WHO). Following a general introduction, the first part of the course covers (1) health systems financing (briefly), (2) workforce, (3) service delivery, (4) medical Products, vaccines and technologies, (5) leadership/governance. The second part focuses on the goals of health systems, including intermediate goals (access/coverage, quality/safety) and final goals (improved health, responsiveness, social and financial risk-protection, and improved efficiency). The course consists of lectures and exercises with group work, where students use the introduced concepts to analyse health systems in various countries.

### **HSRM 553: Health Systems Financing (3 Credits)**

Health systems financing is the central health system-building block that determines

countries' ability to achieve universal health coverage. It has a particularly strong influence on overall health system performance. The aim of the course is to introduce the main concepts and options for health systems financing with a focus on achieving universal coverage and financial risk-protection. The course will enable students to discuss different options of health system financing reforms and to analyse their benefits and disadvantages.

**Content:**

The course provides a structured overview to the main health systems financing functions, including (1) resource mobilization, (2) pooling & allocation to third-party payers, (3) purchasing and payer provider relationships. The advantages and disadvantages of typical health financing mechanisms, such as social health insurance, tax-financed systems, community-based health insurances, and private health insurance will be discussed. Different pathways to achieving (effective) universal coverage of persons, benefits, and costs, in various countries are presented. Furthermore, the course provides an overview of the essential role of payment systems and their incentives for achieving efficiency and transparency in service delivery.

**HSRM 555, 556: The Ghana Health System: Institutions, processes, policies I & II (3 Credits)**

This course aims to provide a clear understanding of the profile and structure of the health care delivery system of Ghana, analyse its key components and evaluate the performance. It will provide students with insight into the historical developments and evolution of the Ghana health system. The course takes an interactive approach, through industrial visits and interactions, and emphasizes an exchange of knowledge and critical discussions through oral presentations, and written evaluations as well as comparisons of the Ghana health system – both in part and as a whole – with other health care systems

**Content:**

The content of the course will include: Overview of the health system in Ghana – relevant history, general organization of the health care system, health facilities, health manpower, public health programmes, health insurance; Decentralization of the Ghana health system – health sector financing, health sector governance, organization of services, and the successes, failures and lessons of health policies in the local context; Evolution of the Ghana health system – health sector reforms/developments and its interaction with other systems. This course will also include study visits to key actors of the health care delivery system of Ghana, for example the Komfo Anokye Teaching Hospital (KATH), Ghana Ministry of Health, Parliamentary select committee on health and other relevant institutions, departments, units, groups and individual persons.

**HSRM 558: Health Care Industry (with Seminar on Medical Devices) (3 Credits)**

The course focuses on industrial providers in health care (pharmaceutical industry, medical technology industry). After completing this course, students have gained an in-depth knowledge on framework conditions, contents and tasks of healthcare management with regard to pharmaceutical and medical technology industry. The acquired knowledge and skills allow students to assess challenges in the context of management issues as well as to

analyse and solve problems in the management of pharmaceutical and medical technology industries and their products. Furthermore, skills of scientific work are further refined.

The course uses different concepts of business management fields, methods of the social sciences as well as medical basics. Lectures deal with characteristics and peculiarities of the management of industrial companies operating within the healthcare sector. As regulatory structures of pharmaceutical and medical technology industry play an important role, there is a special focus on the interface management between R&D (research and development) activities and the management of products and companies. Furthermore, there will be a strong emphasis on marketing and distribution of products. Theoretical background obtained in the lectures is deepened in the exercise.

Selected management issues and problems concerning the operational organization will be analysed on the basis of practical tasks. The practical tasks will be organized in cooperation with a (local) market leader in the portfolio of medical devices where students will be explicitly confronted with important practice-oriented issues from a manufacturers' point of view. They get an insight into the variety of industrial management tasks.

#### **Content:**

*Medical device industry:* market development and trends (definition of medical devices, expenditures, proportions of different kinds of medical devices across the world), regulatory affairs (market approval, stakeholder and processes, regulating medical devices, financing different kinds of medical devices, the role of innovative medical devices in health care), marketing (price, product, place, promotion, player processes, positioning).

*Pharmaceutical industry:* market development and trends (definition of pharmaceuticals, different kinds of pharmaceuticals, expenditures, proportions of different kinds of medical devices, regulatory affairs (regulating pharmaceuticals, financing pharmaceuticals in ambulatory and inpatient care, the role of innovative pharmaceuticals in health care, stakeholder and processes), pricing (price determination of pharmaceuticals, co-payments), evaluation and pharmaco-economic, marketing (price, product, place, promotion, player processes, positioning); and practice-based seminar paper summarizing theoretical and practical results.

#### **HSRM 562: Innovations in Chronic Disease Care and eHealth (3 Credits)**

The course comprises three emerging public health fields – integrated care, eHealth and chronic diseases. The first part of the course will provide insight into the rise of chronic diseases and the challenge it constitutes in health and social care organisation. The various definitions and concepts of integrated care and digital health will be introduced. A framework for integrated care for persons with chronic diseases will be introduced to understand key factors such as leadership & governance, financing and the role of information and communication technologies for implementing integrated care. The course focuses on explaining the need for more integrated systems of care delivery and the opportunity provided by ICT applications, as they can play an important role in making integrated care becoming a reality. The course will promote creativity, entrepreneurship and the establishment of innovative patient centred solutions for an effective implementation of eHealth and mHealth interventions in integrated care. Approaches to involving patients and caregivers in the development, implementation and evaluation of integrated care programmes will be presented and discussed. Beside of the present utilization, future digital



communication forms in an integrated healthcare system will be discussed (e.g. the electronic patient record, telemonitoring), the economic characteristics of the eHealth market as well as the legal framework, data-security, privacy, and integrity will be assessed. The students will become familiar with the current and future use of IT systems, with a special focus on IT systems in hospitals, the elements and structures required for health-related usage of mobile devices (mHealth) and the discourse regarding future challenges and potentials at the interface of technology, health and social care. Various examples from the industry and group-homework will strengthen the gained knowledge. Guided by the frameworks, students will be able to develop integrated care solutions using innovative technologies such as mHealth in collaboration with relevant stakeholders and start-ups.

#### **Content:**

Introduction to chronic diseases/public health challenges, introduction to integrated care, international integrated care programmes, development of integrated care, management and evaluation of integrated care, financing integrated care, introduction to eHealth and mHealth, current digital approaches, IT basics, IT management and compliance, IT safety and risk management, Telematic infrastructure, medical devices, hospital IT, Telemedicine, mHealth – trends and enablers in the sub-region, digitalization and integrated care in the Ghana healthcare system, project work.

#### **HSRM 564: Health Technology Assessment (3 Credits)**

Health Technology Assessment (HTA) is a tool that is being increasingly employed to guide coverage decisions in most high- and middle-income countries. HTA and its methodologies allow a critical assessment of health technologies as the basis for making evidence-based decisions, potentially contributing appropriate use of technologies, efficiency and good value for money of investments in the health care industry. Ghana, like most developing countries, could benefit substantially from greater use of HTA for better informed decision-making on health care delivery. Ghana is in the process of developing an HTA policy framework and pharmacoeconomic guidelines, which are yet to be finalised and implemented. This course will explore various HTA tools and their applicability in developing countries. Students will understand the role of HTA in health care systems and familiarise themselves with the methods underpinning HTA report productions and can use them by themselves. Exceptional to all other courses under this master's programme, this course takes a blended-learning approach and combines classroom lecture format and online learning (including web seminars). Students will only require an internet connection to participate in the online learning and by this, they familiarise themselves with online learning. Students will not only gain experience with e-learning but also use online communication appropriately.

#### **Content:**

Introduction to E-learning and basics of HTA, HTA and decision-making, regulation of health technologies, status/diffusion of health technologies, prioritising technologies for assessment and the role of stakeholders, general methods for producing HTA reports – report production process, domain safety and effectiveness, domain health economics, domains on ethical, social, legal and organizational aspects, quality assessment of HTA reports and impact of HTA.



## **YEAR TWO: SEMESTERS I & II**

### **COH 741, 742: Workshop/Seminar I & II (4 Credits)**

An integrated workshop intended to improve students' ability to use basic epidemiological and economic techniques in planning health services (Primary Health Care services) at the district level. Emphasis will be placed on pragmatic, realistic and feasible methods of planning which can be applied at the district level. Oral presentation of assignments by students would be a key component of the course. Specialists in various fields of health services planning and management both in the public and private sectors would be invited to make presentations to the students.

### **HSRM 651: Field Applications in Health Systems Research and Management (7 Credits)**

As part of the requirements for the completion of the Master's programme, students will spend 12 weeks in relevant institutions involved in health systems research and management across the country. During the period, students will be expected to acquire skills and competencies in health systems research, policy and management. The field supervisors of students will provide an enabling environment for the competency acquisition; the field supervisors will grade the performance of each student. Additionally, students will collect, collate and analyse data on specific health system, policy and management issues from the various institutions. The students will write up their findings and present copies to their various host institutions.

### **HEALTH SYSTEMS RESEARCH AND MANAGEMENT - FIELD ASSIGNMENT**

1. Health systems operations at the Regional or district or municipality level.
2. Health Technology Assessment situation at the Regional, district or municipality level
3. Priority setting at the Regional or the district or municipality level
4. Innovations in Chronic Diseases care and eHealth.

### **MPHIL/MPH IN HEALTH SYSTEMS RESEARCH AND MANAGEMENT.**

#### **COMPETENCES IN SPECIFIC SUBJECT AREAS DURING FIELD WORK**

This instrument serves as a checklist of competences that students are expected to acquire during the MPHIL/MPH Health Systems Research and Management field residency. Both

supervisor and student should work together to ensure adequate opportunities to acquire or improve on these competencies.

Name of Resident: .....  
 Name of Supervisor:

Region/District: .....

Date of Assessment:.....  
 Signature of Supervisor:

Competence		Score		
		0	1	2
1.	<b>HEALTH SYSTEMS ASSESSMENT</b>  1.1 Prepare an action plan for assessment of the Ghana Health Systems at district/sub-district/ health facility 1.2 Policy analysis and review 1.3 Prepare a budget for a given situation 1.4 Conduct a meeting at which you give oral and written presentations 1.5 Submit a report of the meeting 1.6 Organise/conduct a management meeting/conference			
2.	<b>BASIC EPIDEMIOLOGY &amp; HEALTH SYSTEMS RESEARCH</b>  2.1 Analyse the disease pattern for an area or from health records 2.2 Design, conduct and participate in a survey in the district 2.3 Perform a community assessment.			
3.	<b>HEALTH TECHNOLOGY ASSESSMENT</b>  3.1 Identify health policies and technologies meant to improve universal health coverage 3.2 Investigate and analyse economic, medical, social and ethical influences of production, diffusion and use of technology for health care delivery. available information			
		0	1	2
4.	<b>HEALTH CARE INDUSTRY</b>  4.1 Provide a detailed account of the Health Care Industry in the Region or the District of field attachment.			
5.	<b>HEALTH PROMOTION/HEALTH EDUCATION</b>  5.1 Plan and mobilize a community for a health education activity on chronic disease care and prevention. 5.2 Design and carry out health education on identified health problems 5.3 Give an oral presentation to District Assembly Health Sub			

	- committee e.g. community assessment or student bulletin/newsletter/peer-reviewed journal			
6.	<b>TRAINING</b> 6.1 Facilitate an in-service training programme 6.2 Organise a workshop			

Rating Scale:

- 0 – Not observed; (steps, tasks or skill not performed by student during attachment)
- 1 – Unsatisfactory (unable to perform the steps or tasks according to standard procedure)
- 2 – Satisfactory (performs the steps or tasks according to standard procedure)

**ASSESSMENT/EVALUATION INSTRUMENT  
FOR FIELD WORK**

Name of MSc/MPH resident:.....  
 Name of Supervisor:  
 .....  
 Region/District: .....

Date of  
 Assessment:.....  
 Signature of  
 Supervisor:.....

**1. SUPERVISORY SKILLS**

- A. Solves even difficult problems and gets the most out of even deficient employees without difficulty
- B. Resolves problems and improves employee's performance
- C. Handles most supervisory decisions but may occasionally cause management problems
- D. Sometimes makes supervisory decisions which cause management problems
- E. Frequently causes problems as a supervisor which then requires interventions.

**2. SKILLS DEVELOPMENT DURING TRAINING PERIOD**

- A. Showed more significant development in skills
- B. Progressed more rapidly in skills

- C. Showed steady development in skills
- D. Has shown little, if any, improvement
- E. Performance has deteriorated

### **3. RESPONSIBILITY TO GUIDANCE AND COUNSELLING**

- A. Knows when to seek guidance and is highly creative in implementing suggestions or recommendations.
- B. Considers supervisory guidance counselling and is usually able to apply it with some help from peers
- C. Sometimes rejects counselling without considering its merits
- D. Usually rejects guidance/counselling without considering its merits

### **4. ABILITY TO SOLVE PROBLEMS**

- A. Solves difficult problems and gets the most out of the situation
- B. Usually understands and presents good solutions to new and particularly difficult problems.
- C. Evidence of some good understanding of the problem and offers some solutions
- D. Sometimes asks questions or presents solutions which complicate the management of routine problems
- E. Shows lack of understanding and is unable to solve management problems

### **5. PSYCHOLOGICAL DISPOSITION**

- A. Very stable emotionally. Emerges as a superior performer and leader in the event of any crisis,
- B. Usually rises to the occasion in the event of any crisis
- C. Performance in crisis is as effective as other times
- D. In crises, performance is somewhat less effective than at other times
- E. Highly irritable, and in crises performance is ineffective

### **6. ABILITY TO WORK WITH OTHERS**

- A. Works with others in ways that demand the contribution of each individual and consistently produces excellent results
- B. Is able to cooperate with others in a manner that helps produce better work than anyone member of the group could produce
- C. Satisfactorily achieves results when working with others as required
- D. Performance is sometimes impaired if it requires working with others
- E. Is not effective when working requires cooperative effort.

### **7. QUANTITY OF WORK**

- A. Exceptionally productive, accomplishes far more than is expected
- B. Usually exceeds standards of productivity
- C. Meets standards consistently
- D. Sometimes falls below productivity levels
- E. Consistently produces less than is expected

## **8. QUALITY OF WORK**

- A. Produces exceptionally good work. Trainee is seen as a model for others
- B. Produces above average work
- C. Produces work which most of the time meets standards
- D. Sometimes produces work which does not meet standards
- E. Regularly produces work which does not meet standards of quality

## **9. PUNCTUALITY TO WORK**

- A. Is exceptionally prompt and usually ahead of schedule
- B. Can be relied upon to meet all deadlines and is sometimes ahead of schedule
- C. Is almost always on time with assigned work
- D. Is sometimes behind schedules
- E. Regularly misses deadline

## **10. INITIATIVE, CREATIVITY AND JUDGEMENT**

- A. Very stable emotionally. Emerges as a superior performer and leader in the event of any crises
- B. Moves by reactivity to meet programme objectives and solves somewhat unusual problems.
- C. Deals effectively with usual problems and challenges.
- D. Sometimes fails to take steps that would solve or head-off usual problems
- E. Often fails to take obviously necessary actions or takes wrong ones.

## **11. COMMITMENT TO PROGRAMME GOALS**

- A. Has achieved such an integration of personal and programme interests so that conflicts rarely arise.
- B. Has worked out a relationship between personal and work responsibilities which allows a satisfactory resolution of almost all conflicts
- C. Is generally able to balance personal and programme concerns
- D. Too often puts personal concerns ahead of programme
- E. Seems exclusively concerned with own convenience, welfare, and advancement to the detriment of programme

## **12. ABILITY TO EXPRESS SELF VERBALLY AND IN WRITING**

- A. Expresses complex and controversial materials in such a lucid and persuasive way that achievement of objectives is materially aided.
- B. Gets message across even when material is complex
- C. Communicating failures rarely cause problems.
- D. Failure to communicate clearly sometimes causes problems
- E. Often does not get the desired response even to routine material because the message is not understood.

## **13. PLANNING AND ORGANISATION**

- A. Exceptional skills in planning and organising; anticipates subtle and difficult issues and deploys resources imaginatively.
- B. Skilled planner and organizer. Handles problems appropriately and works out overall and detailed solutions
- C. Sets and adheres to priorities, available resources, and schedules under most circumstances

- D. Sometimes is lazy in determining and adhering to priorities and available resources.
- E. Needs continuous supervision to determine priorities, resource needs, and time management for even routine tasks.

**14. RESPONSIVENESS TO SUPERVISION**

- A. Knows when to seek supervisory guidance; is highly creative in implementing recommendations.
  - B. Works with supervisory guidance constructively.
  - C. Usually considers supervisory guidance carefully and is usually able to apply it.
  - D. Sometimes rejects supervisory guidance without considering its merits.
  - E. Usually rejects supervisory guidance without considering its merits.
15. Does this trainee have any limitations as identified above which might limit his/her job performance?
16. Does this trainee have any strengths not identified above which might enhance his/her effectiveness?

**17. ANALYTICAL SKILLS**

- A. Very efficient in analysing issues
- B. Able to analyse issues efficiently most of the time.
- C. Analyses issues with some difficulty.
- D. Complicates matters in the bid to analyse issues
- E. Hardly able to analyse issues.

**18. HONESTY, INTEGRITY AND ACCOUNTABILITY**

- A. Very honest and can be trusted with management of resources.
- B. Most of the time honest and endeavours to manage resources as such.
- C. Sometimes, can be trusted with management of resources.
- D. Cannot be relied on most of the time to manage resources in an honest way.
- E. Cannot be trusted in the management of resources

.....  
Signature of trainee

Date

- I have read this evaluation and had an opportunity to discuss it.
- A. I concur with this evaluation in all respects
  - B. Although this evaluation is reasonable, this supervisor is somewhat more demanding.
  - C. Although the evaluation is reasonable, this supervisor is somewhat less demanding than most.
  - D. I disagree with this evaluation in the following ways: \_\_\_\_\_

**FIELD COORDINATOR'S ASSESSMENT OF OVERALL JOB PERFORMANCE**

- A. Exceptional. This trainee's performance is far better than can be reasonably expected and has brought credit to the trainee and the programme

- B. Well above average. This trainee has made a significant contribution and has enhanced the position s/he holds
- C. Competent. This trainee is fully effective in performing her/his job
- D. Marginal. This trainee is sometimes less effective in performing her/his job
- E. Inadequate. This trainee is a hindrance rather than an asset

Comments:

.....

.....

.....

Signature:  
(Field supervisor)

Date:

**HSRM 653 & 654: Colloquium and Master’s Thesis (24 Credits)**

Within the last (fourth) semester, research colloquiums will be organised and open to all students, faculty and other scholars who are interested in sharing current research in the fields broadly related to the topics of health systems, policy and management. The colloquium takes the form of friendly and informal meetings and students are required to present their works in progress. Participants will discuss the research work and exchange experiences and expertise. Students finish the master’s programme with a completed master’s thesis or an academic research paper, and submit it in partial fulfilment of the requirements for the award of the MPH/MPhil degree.

**ELECTIVE COURSES**

**COH 728: Health Education II (3 Credits)**

This course seeks to provide the necessary concepts and skills for participants to be able to plan and implement health education and promotion programmes. It will also provide participants with basic competence that would enable them to evaluate health education programmes.

**Content:**

Description and definition of terminology: health as a medical, social, psychological, political and environmental construct; The role of the Health Educator; The practice of Health Education; Social and psychological aspects of Health Education and Promotion; Social-norms, values and expectations, roles and status - conformity and deviance; The family and the community; Psychological-attitude theories; Behaviour and behaviour change theories; Habits and addictions; Decision making and

motivation theory; Theory of adult learning; Planning, implementation and evaluation of Health Education and Promotion interventions and strategies; Health Education in schools - delivering direct Health Education services (teaching, training, health counselling, consulting); Community organization; Communication using media, mass media, audio-visual aids, programmed instructions; Current major challenges in life styles and human behaviour.

### **COH 718: Quality Assurance (2 Credits)**

This course seeks to improve the understanding of health care provision as a commodity on sale to the consumer (client/patient) and thereby promote the improvement of quality of care in our health institutions.

#### **Content:**

Definition of Quality Assurance; Historical perspective of quality assurance; Managing quality; Consumer satisfaction; Quality and pricing/cost and attaining quality; Ensuring compliance to quality standards; Organizational effects on quality; Constraints to quality management; Planning for quality; Quality assurance process; Participatory approach; Relationship between evidence-based medicine, clinical practice guidelines & quality improvement; Design, implementation & evaluation of quality improvement programmes in health facility settings; Multidisciplinary approach to Quality Assurance; Standards setting, indicators and quality monitoring; Maintaining and sustaining Quality Assurance; Quality Assurance Management (QAM) – Quality assurance teams; Continuous quality assurance at all levels of health care delivery.

### **COH 864: Leadership for Health Systems Transformation (3 Credits)**

The focus of this course is Strategic Leadership Principles and Practice. It is meant to be designed to help the students build and strengthen their skills to become more effective in their leadership roles in the Ghana Health Systems to facilitate the needed transformation. The course adopts a seminar approach that builds on each student's past knowledge and experience, and takes advantage of the individual's high motivation to accomplish the learning tasks.

#### **Content:**

Core leadership disciplines – personal mastery, mental models, shared vision, systems thinking, team learning; Promoting institutional change – analysis of critical constraints, establishing strategic objectives and key moves; Developing a learning organization for programme implementation via interactive computer exercises using the STARguide software; Concept of digital nervous system – gathering, managing and using information optimally; Leadership models and styles; Managing “bad news”; mentoring; Succession planning.



## **COH 842: Hospital Administration (2 Credits)**

### **Content:**

Define hospital; Challenges of Hospital Administration; Types and classification of hospitals; Role of hospitals in the health system; Hospital governance; Administration of services; Departments within a hospital; Types of services provided by hospitals; Financing hospital services.

### **READING LIST:**

Students will have access to handouts and additional study materials that will be made available by individual lecturers.

**Porta M, Greenland S, Last JM (Eds).** A Dictionary of Epidemiology. 5<sup>th</sup> Edition, Oxford University Press, 2008

**WHO.** Introduction to Basic Epidemiology and Principles of Statistics for Tropical Diseases Control. Geneva. 2002

**Lancet.** Epidemiology Series. The Lancet Vol 359, January 2002. [www.thelancet.com](http://www.thelancet.com)

**Green A.** An Introduction to Health Planning in Developing Countries, Oxford Medical Publications, Oxford, 1999

**McWay, D C, JD.** Today's Health Information Management: An Integrated Approach, Thomson Delmar Learning, 2008

**Grebner, L.** Case Studies for Health Information Management, Thomson Delmar Learning, 2007

**Shortell SM, Kaluzny A.** Health Care Management Organisation Design and Behaviour, Delmar Cengage Learning, 2006

**Williams SJ, Torrens PR.** Introduction to Health Services, Thomson Delmar Learning, 2008

**Morone JA, Litman TJ, Robins LS.** Health Politics and Policy, Thomson Delmar Learning, 2008

**Butterfield R,** Essentials of Health Care Financial Management, Delmar Cengage Learning, 2008

**McLean RA,** Financial Management in Health Care Organisation, Delmar Cengage Learning, 2003

**Garrison, R,** Morreen, E, Brewer, P. Managerial Accounting, McGraw-Hill/Irwin, 2009

**Ginter, PM,** Swayne, LC and Duncan WJ; Strategic Management of Health Care Organisations, Wiley-Blackwell, San Diego, 2002

**Pilbeam, S,** Corbridge, M; People Resourcing: Contemporary HRM in Practice, Prentice-Hall International, ISBN-10: 027370379X ISBN-13: 978-0273703792

**Torrington,** Taylor and Hall; Human Resource Management (7th Edition), Prentice Hall; ISBN13: 9780273710752 ISBN10: 0273710753

**WHO.** Designing and Conducting Health Systems Research Projects, Vol 1&2, Geneva, 2003

**WHO.** World Health Survey; Survey Manual. Geneva, 2002

**MEASURE DHS.** Training guidelines for DHS surveys, Calverton, MD USA, 2000

**ICF Macro.** Demographic and Health Survey interviewers' manual, Calverton MD, USA, 2011

**Day R.** How to Write and Publish a Scientific Paper (5<sup>th</sup> Edition), The Oryx Press, Westport, CT, USA, 1998

**Edberg, M.** Essentials of Health Behavior: Social and Behavioral Theory in Public Health, Jones and Bartlett, 2007

**Simnett I.** Evidence-based Health Promotion, John Wiley, 1999

**Gabbay, J,** le May, Andrée. Practice-based Evidence for Health Care: Clinical Mindlines, Routledge, 2010

**Stevens, A et al.;** Health Care Needs Assessment, Radcliffe Publishing Ltd. UK, Abingdon, 2004

**Koch, G.** Basic Allied Health Statistics and Analysis, Thomson Delmar Learning, 2000

**Rabe-Hesketh S,** Eventh B. A Handbook of Statistical Analysis, using STATA, 3rd Edition, 2004

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**Samuelson, WF** and Marks, SG. Managerial Economics, John Wiley & Sons, 2006,

**Donabedian A.** An Introduction to Quality Assurance in Health Care. Oxford: Oxford University Press, 2002

**Ovrevait J.** Evaluating Health Interventions, Open University Press, 1998

**Asante**, Asenso-Okyere. Economic Burden of Malaria in Ghana”, Institute of Social and Economic Research, University of Ghana, Technical Report submitted to the WHO, Geneva, 2003

**Asenso-Okyere**, W. K., Dzator, J. A. (1997). Household cost of seeking malaria care. A retrospective study of two districts in Ghana. *Soc. Sci. Med.* Vol. 45, No. 5, pp. 659-667

**McGuire T.** Physician agency. In: Newhouse, J., Culyer, A. (Eds.), Handbook of Health Economics, Vol. 1. North-Holland, Amsterdam (Chapter 9), 2000

Safe Motherhood: Ten Years of Lessons and progress. Technical Consultation, Colombo, 1997

**WHO.** The World Health Report 2005: Make Every Mother and Child Count. Geneva, 2006

**UNICEF.** Countdown to 2015 reports: maternal, newborn and Child Survival, New York, [www.countdown2015mnch.org](http://www.countdown2015mnch.org) 2008-13

**Ghana Ministry of Health.** Child Health Policy, Accra, 2009

**Ghana Health Service.** Annual Reports, Accra

Ghana Ministry of Health. The Health Sector Programme of Work 2007-2011, 2012-2016, Accra

**Ghana Statistical Service.** Ghana Living Standards Surveys, Accra

**Ghana Statistical Service.** Ghana Population and Housing Census, Accra, 2010

**GSS/GHS/ICF Macro.** Ghana Child Verbal Autopsy Study, Accra, 2008

**GSS/GHS/Macro International.** Ghana Maternal Health Survey, Accra, 2008

**GSS/GHS/ICF Macro.** 2008 Ghana Demographic and Health Survey, Accra, 2009

**Ghana Ministry of Health/GHS.** Ghana MDG-5 Acceleration Framework and Country Operational Plan, Accra, 2012

**GHS.** Ghana Multiple Indicator Cluster Survey with an Enhanced Malaria Module and Biomarker, Accra, 2011

**Government of Ghana,** National Population Policy (Revised), 1994

**Ghana Ministry of Health,** National Reproductive Health Services Policy and Standards, Accra, 2000

**Yassi A, et al.** Basic Environmental Health, Oxford University Press, 2001

**Cairncross S,** Feachem RG. Environmental Health Engineering in the Tropics: An Introductory Text. Earthscan Pub. Ltd., 2010

**Campbell-Lendrum**, Corvalan C. Climate Change and Developing-Country Cities: Implications for Environmental Health and Equity. Journal of Urban Health. Bulletin of the New York Academy of Medicine. Vol 84 No.1 do:10.1007/s11524-007-917-x

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**Ghana Ministry of Health/GHS** Ghana National Policy on Adolescence and Adolescent Health, Accra

**Senge P**. The Fifth Discipline; The Art & Practice of a Learning Organization, Random House, London, 2006

**Covey SR**. The 8<sup>th</sup> Habit: From Effectiveness to Greatness, Simon & Schuster, London, 2004

**Johns Hopkins Bloomberg School of Public Health-CCP**. Strategic Leadership and Management; Workshop manual, Kumasi, 2008

**WHO**. Improving Access to Quality Care in Family Planning: Medical Eligibility Criteria for Contraceptive Use, Geneva, 2006

**WHO**. Population Reports; GATHER Guide to Counseling, Series J, No. 48, Geneva, 1998

**WHO.** World Health Report Health systems: improving performance. Geneva: WHO Document Production Services, 2000

**WHO.** Everybody's business: Strengthening health systems to improve health outcomes. WHO's framework for action. Geneva: WHO Document Production Services, 2007

**Busse R, Schreyögg J, Gericke C.** Analysing changes in health financing arrangements in high-income countries. A comprehensive framework approach. Washington, DC, The World Bank, 2007

**Busse R, Schreyögg J, Stargardt T.** Management im Gesundheitswesen. Das Lehrbuch für Studium und Praxis.3., vollständig überarbeitete und erweiterte Auflage. Berlin-Heidelberg: Springer, 2013

**Maier C.** presentation on Nurses in advanced roles in primary care: policy levers for implementation, 2016 (Available at: <https://www.oecd.org/els/health-systems/Item-2a-Nurses-advanced-roles-Maier-University-Technology.pdf>)

**Panteli D, Arickx F, Cleemput I, Dedet G, Eckhardt H, Fogarty E, Gerkens S, Henschke C, Hislop J, Jommi C, Kaitelidou D, Kawalec P, Keskimäki I, Kroneman M, Lopez Bastida J, Pita Barros P, Ramsberg J, Schneider P, Spillane S, Vogler S, Vuorenkoski L, Wallach Kildemoes H, Wouters O, Busse R.** Pharmaceutical regulation in 15 European countries: Review. Health Systems in Transition, 18(5):1–118, 2016

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**Papanicolas I, Smith P.** Health System Performance Comparison. An agenda for policy, information and research. Open University Press, New York, 2013 (Available at: [www.euro.who.int/data/assets/pdf\\_file/0009/244836/Health-System-Performance-Comparison.pdf](http://www.euro.who.int/data/assets/pdf_file/0009/244836/Health-System-Performance-Comparison.pdf))

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Gesundheitswesen, München und Jena: Urban & Fischer, 2. Auflage, S. 461-484, 2003

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**AG Reha-Ökonomie im Förderschwerpunkt Rehabilitationswissenschaften (Hessel, Kohlmann, Krauth, Nowy, Seitz, Siebert, Wasem).** Ökonomische Evaluation in der Rehabilitation. Teil I: Prinzipien und Empfehlungen für die Leistungserfassung, 1999.

**AG Reha-Ökonomie im Förderschwerpunkt Rehabilitationswissenschaften (Burchert, Hansmeier, Hessel, Krauth, Nowy, Seitz, Wasem).** Ökonomische Evaluation in der Rehabilitation. Teil II: Bewertung der Ressourcenverbräuche, 1999.

**Siebert.** Transparente Entscheidungen in Public Health mittels systematischer Entscheidungsanalyse, In: Schwartz et al. (Hrsg.): Das Public Health Buch. Gesundheit und Gesundheitswesen, München und Jena: Urban & Fischer, 2. Auflage, S. 485-502, 2003

#### **WEBSITES OF PUBLIC HEALTH INTEREST:**

[www.measuredhs.com](http://www.measuredhs.com)

[www.basics.org](http://www.basics.org)

[www.popline.org](http://www.popline.org)

[www.cdc.gov](http://www.cdc.gov)

[www.prb.org](http://www.prb.org)

[www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov)

[www.unfpa.org](http://www.unfpa.org)

[www.who.int](http://www.who.int)

[www.worldbank.org](http://www.worldbank.org)

[www.unicef.org](http://www.unicef.org)

[www.moh-ghana.org/](http://www.moh-ghana.org/)

## META SEARCH ENGINES

- Dogpile: <http://www.dogpile.com>
- Mamma: <http://www.mamma.com>
- Metacrawler: <http://www.metacrawler.com>
- Vivisimo: <http://www.vivisimo.com>
- Search.com: <http://www.search.com> IQWiG Methodenpapier ([hier zum Download](#))

## FREE ACCESS TO ONLINE JOURNALS

- Health Internetnetwork(HINARI)<http://www.healthinternetwork.org/>
- Programme for the Enhancement of Research Information(PERI)  
<http://www.inasp.info/peri/>
- Electronic Information for Libraries(eIFL) <http://www.eifl.net/>
- Bioline: <http://www.bioline.org.br>

## Staff, Qualification and Areas of Specialisation

The study content will be mainly taught by the teaching and research staff of both the KNUST-School of Public Health and the Department of Health Care Management, Berlin University of Technology, Germany. These two departments have been in collaboration since 2014 through education and research training of doctoral students from Ghana. This partnership is established to endorse efforts to establish cooperative ties in research and education to effectively strengthen health policy developments in developing countries towards universal health coverage.

## STAFF, QUALIFICATION & AREAS OF SPECIALIZATION – KNUST SCHOOL OF PUBLIC HEALTH

Name	Status	Qualification	Specialty
Dr Easmon Otupiri	FT	DVM, MSc, MPH, MSc, PhD	Health systems research, Environmental health, Epidemiology, Occupational health, Child survival, Public health
Dr A.K. Edusei	FT	BSc, MSc, PhD	Nutrition, Biostatistics, Public Health, Health Systems

			Research Methods, Health Promotion.
Prof E. Owusu-Dabo	FT	BSc, MB ChB, MSc, FGCP, MWACP, PhD	Health systems research, Disease control, Computer skills, Health services planning, Epidemiology, Public health
Prof. H Tagbor	FT	BSc, MB ChB, DrPH	Epidemiology, Disease control, Public health
Dr P Agyei-Baffour	FT	BA, MA, Postgrad Dip, PhD	Public health policy and planning, health economics, health systems research and management, Human Resource for Health, Health sector financing and management, Occupational and environmental health, Social science research, project management
Dr. Sam. Newton	FT	BSc,MSc, MBChB, PhD	Epidemiology,Health Systems Research, Nutrition and Research Methods
Dr. Kofi Akohene Mensah	FT	BSc, MSc, PhD	Public Health and Health Policy, Managing and Researching Health care systems, Public Health Nutrition, HIV/AIDS community Based interventions, Human Resource Management in the Health Sector
Dr. Yeetey Enuameh	FT	MD, MSc, DrPH	Adolescent Health, Sexual and Reproductive Health, Evidence-based Health Care
Dr. Amuasi	FT	Dip, BSc, MBChB, MPH, MS, PhD,	Health Outcomes Research, Infectious Disease Research, Health Policy Analysis
Mr. Paul Okyere	FT	BA, MSc	Public Health Promotion, Prevention and Control of Road Traffic Injuries, Curriculum Design and Development
Mr. Appiah Brempong	FT	BSc., MSc.	Water, sanitation and Hygiene; Health Impact Assessment; School Health, Social and Behaviour



			Change Communication; Health Education and Promotion
Mrs. Rose Odotei Adjei	FT	BEd, MSc, Post grad Dip.	Public Health, Health promotion, HIV AIDS research, Health systems research, social and behavioural change reserach
Mr E Nakua	FT	BSc, MSc	Medical statistics, Computer skills
Dr (Mrs) Agatha Bonney	PT	BSc, MD, MPH, FGCP	Maternal and child health, Gender, Public health
Prof (Mrs) EA Addy	PT	BA, MSc, Postgard dip MCN, Dip Diet, Postgrad Cert FPC	Health education and promotion, Nutrition
Dr K Addai Donkoh	PT	BSc, PhD	Health services management
Mr V Tay	PT	BSc, MSc	Health education
Mr JK Agyeman	PT	BEd, MSc, MBA, ICA Ghana	Health economics, Managerial economics
Mr EK Agyare	PT	BSc, MSc	Health services management, hospital administration
Rev (Prof) J Appiah-Poku	PT	STM, STB, FABTP	Research ethics
Mrs M Opare-Addo	PT	BPharm, MSc	Quality assurance
Dr SA Akor	PT	BSc, MB ChB, MA, MComm Health	Health services planning, Health policy
Dr P Karikari	PT	DDS, MSc	Quality assurance, Health administration
Mr O Nkrumah	PT	BSc, MSc	Demography
Prof Y Adu-Sarkodie	PT	BSc BMed Sc, MB ChB, MSc, Dip. GUMed, DLSHTM, MWACP, FGCP, PhD	Disease control, HIV/STIs

Name	Status	Qualification	Area of specialisation
<b>DEPARTMENT OF HEALTH CARE MANAGEMENT, TU BERLIN</b>			
Reinhard Busse	FT	Prof. Dr. med., MPH FFPH	Health systems and policies, health services, health economics, health technology

			assessment
Wilm Quentin	FT	PD (Assoc. Prof.), Dr. med., MSc HPPF	Health systems and policies, health financing, payment systems, costing
Ewout van Ginneken	FT	PhD, MSc	International health systems, health financing and policies
Dimitra Panteli	FT	DrPH, MD, MScPH	Evidence-based health care and policy, health systems, health technology assessment, pharmaceutical regulation and prices, cross-border care
Cornelia Henschke	FT	Post-doc, Dr.rer.oec., Dip.-Ing (MSc)	Funding mechanisms for medical devices, reimbursement systems in health care, inpatient innovations
Alexander Geissler	FT	Dr.rer.oec., Dip.-Ing. (MSc)	Health systems and services, payment and quality of health services, patient classification systems
Victor Stephani	FT	Dr.rer.oec. Cand., M.Sc	e-Health / Telemedicine, pharmaceutical market, developing aid
Verena Struckmann	FT	DrPH Cand., MScPH	Integrated care, health systems, cross-border care
Daniel Opoku	FT	DrPH Cand., MScPH	Health systems development, health care innovations, evidence-based health policy