

INTERNATIONAL HEALTH & SUSTAINABLE DEVELOPMENT (IHSD)

IHSD 6010 Comparative Health Systems (3)

Health systems around the world face the challenge of ensuring continued improvement in population health with a limited availability of resources. Despite their common challenges, no two health systems are identical. This course introduces comparative analysis of health system design and performance, both at the population level and through an equity lens. The course consists of 30 sessions. Readings, videos, and activities will be assigned to add to the student's knowledge and facilitate discussions. Students will be assessed through exams and reflection papers, and a group health system analysis which they will present verbally and in a report. There are no prerequisites for this course. This course is required for the Master's in Public Health sustainability track in the Department of International Health and Sustainable Development.

IHSD 6130 Health Economics for Developing Countries (3)

This course provides students with the background and tools to understand, analyze, and evaluate economic aspects of health systems problems of low- and middle-income countries. The course covers the following topics: health and economic development, micro-economic aspects of health care services, health care financing, and economic evaluation. Most examples used in the class will pertain to health system interventions that aim to improve the availability and quality of health services. Lectures will be combined with problem sets, class discussions, and group presentations that focus on issues affecting the demand for and supply of health care services as well as financial and payment interventions that aim to improve the performance of health systems.

IHSD 6200 Evaluation of Program Interventions in Global Health (3)

This course provides in-depth training in basic concepts, principles, and practices for impact evaluation of public health interventions in international settings. Examples focus on sexual and reproductive health interventions (including HIV-prevention), but the skills learned apply to all health areas. A team-based project allows students to apply impact evaluation skills (e.g., identification of study designs, indicators, data, analytical approach) to real-life settings. The course provides grounding in evaluation study designs, develops skills in designing evaluation plans, and is a basis for specialized courses on data analysis, sampling, and advanced evaluation research. This course is designed for students interested in program monitoring and evaluation jobs in global contexts and should be taken in lieu of SBPS-6340 and TRMD-6200.

Prerequisite(s): SPHL 6080 or 6880.

IHSD 6240 Health and Sustainable Development in a Changing World (3)

Health and Sustainable Development in a Changing World is tailored to and intended for students entering the MPH program in International Health and Sustainable Development. The course provides an overview of the major health problems facing low-and-middle income countries (LMIC); the divergent historical patterns of public health in economically rich versus poor societies; the links among public health, development, and culture; and strategies for improving public health in LMIC.

IHSD 6300 Monitoring of Global Health Programs (3)

This course equips students with program monitoring principles and skills for tracking the performance and results in public health programs. The course will focus on programs and interventions in global settings, although the skills can also be applicable in the domestic context. Students will learn to develop frameworks and models for program monitoring and evaluation, develop appropriate indicators and plans to measure program implementation and results, and apply them to actual programs. This course is required for MPH students in IHSD and to be followed by a course on program evaluation. It is designed for students who are interested in program monitoring and evaluation jobs in global contexts.

Prerequisite(s): SPHL 6080 or 6880.

IHSD 6331 Public Health and Nutrition in Complex Emergencies (3)

The goal of this course is to familiarize students with the approaches, field methods, and selected technical knowledge required to mitigate the nutritional and public health effects of complex humanitarian emergencies and disasters. Lectures and discussions will be provided by experienced faculty from university partners, government officials, and field-based practitioners with experience working in emergency contexts. Because of the unique opportunity to access guest speakers and materials from the Epidemiologic Intelligence Service at CDC and the applied nature of this course, it is offered in intensive format.

IHSD 6470 Public Health Leadership for Sustainable Development in the Age of Disruption (3)

This immersive two-week course in rural Wyoming explores leadership, sustainable development, and adaptive strategies in the face of global disruptions. Through preparatory readings, discussions, and hands-on experiences in Wyoming's rugged terrain, students will examine public health leadership in complex, disrupted contexts. The curriculum incorporates sustainability science, disaster management, and theories of change, with case studies on Grand Teton National Park, conservation legacies, fracking controversies, and innovative healthcare delivery models. Students will collaborate with rural healthcare providers, indigenous communities, and crisis teams, gaining insights into health disparities and pioneering solutions like telehealth. Wyoming's unique setting offers a living laboratory for reflection, leadership development, and environmental stewardship. A three-day wilderness adventure is available as an optional course conclusion.

IHSD 6480 Rwanda: Anatomy of Sustainable Health Systems (3)

This course provides an immersive learning opportunity for one of the most successful LMIC health system in Sub-Saharan Africa, the Rwandan health system. Rwanda provides a learning laboratory for students to experience the organization and functioning of the Rwandan health care system. They will apply analytical methods to Rwandan de-identified health data. They will also visit key components of the health system: community health workers; primary health care, district, referral and teaching hospitals. Through field visits, guest lectures and workshops, they will assess interventions and interpret findings relevant to public health policy. Finally, students will write a case study on the health system aspects focusing on maternal, neonatal, child and adolescents' health (MNCAH). In addition to the listed pre-requisite courses, students must also complete the CITI Training on Research Ethics and Data Privacy prior to enrollment.

Prerequisite(s): SPHL 6050 and 6060.

IHSD 6760 International Family Planning: Policies and Programs (3)

This course is designed to equip students with a knowledge and skills to work in international family planning, one of the most successful initiatives to date in the field of international development. Organized around the six pillars of the WHO framework, it covers the fundamentals of family planning programming through the lens of health systems strengthening. It reviews the landmark events in the history of family planning that shape policy today. Students will develop presentation skills and will learn to use "tools of the trade" in this field (reference materials, software tools). They will analyze the family planning situation and make recommendations for improvements in a country of their choice. Recommended for those intending to work in reproductive health.

IHSD 6790 Food Security and Resilience (3)

Students will examine the impacts of rapidly globalizing food systems on food and nutrition security at local, household, and intra-household levels in this course. This topic is especially relevant now because of the increased policy attention and resources for programming that are focused on promoting improved food security, nutrition and sustainability. This course will provide students with the analytical skills for identifying the elements of resilient food systems and the outcomes of food and nutrition security, access to organizations prominent in international food security policy discussions, and a background in readings relative to this debate.

IHSD 6830 International Health Policy (3)

The primary aim of this course is to present an overview of health policy issues in low- and middle-income countries and to provide skills in analyzing the health policy process. In addition to providing an overview of policies at the country level to improve health systems performance, the course also looks at the role governments, the private sector, and international health partners play within national health policy frameworks. Factors such as power, context, and governance are analyzed with both the practical and the ethical considerations of how the policy process operates in different cultures. This course helps students develop their own capacities to analyze, criticize, evaluate, and construct policy-oriented arguments.

IHSD 6860 Public Health in Cuba (3)

The course addresses how the Cuban government has prioritized the development of universal health care in the last five decades, with a special emphasis on the efforts to strengthen primary health care (PHC) and to articulate PHC with more complex levels of care. The course contextualizes and analyzes the programs to prevent infant mortality and to prevent and control infectious diseases such as polio, malaria, tuberculosis, dengue, and HIV, as well as the economic and political context in which these public health initiatives developed. The course takes place in Havana in partnership with the National School of Public Health of Cuba. It includes site visits to health facilities and community-based organizations.

IHSD 6870 Adolescent Health Policies and Programs (3)

This course serves to: (1) increase knowledge and awareness of the context, design, and effectiveness of interventions to prevent and respond to adolescent health risk taking; and (2) develop professional skills in the use of quantitative methodologies to determine the health needs/problems of adolescents and in the formulation of workable strategies to respond to identified needs. The course includes discussion of major policy issues and controversies surrounding specific adolescent health program approaches. Students will compare interventions for addressing common health problems in adolescence and meeting the needs of special youth populations in low- and middle-income countries with similar interventions in developed countries. The key components of successful and unsuccessful programs in specific health areas will be addressed.

IHSD 7020 Communication Research for HIV/AIDS and Reproductive Health (3)

This course constitutes a practical introduction to the research methodologies used in planning a communication program for promoting desirable health behaviors, designing appropriate messages, pre-testing communications and evaluating program effectiveness for changing behaviors. Most examples and datasets will pertain to international reproductive health or HIV/STI prevention, but skills learned will be applicable to other areas of public health. Lectures will be combined with exercises in which students carry out communication pre-testing, conduct qualitative research (focus group discussions or in-depth interviews) and analyze the results, and conduct secondary analyses of existing survey data using statistical software. These skills are basic to the systematic approach in designing, implementing and evaluating a health communication program aimed at changing health behaviors.

IHSD 7030 Health Systems and Policy in Low- and Middle-Income Countries (3)

This course provides an in-depth analysis of global health systems and policies, focusing on the various factors that shape them, both historically and in the present. Students will explore different models of health service delivery and critically assess their strengths and limitations in various international contexts. Through case studies and hands-on activities, students will develop skills in policy analysis and planning, advocacy, and funding prioritization. Key topics include managing cultural diversity within health systems, incorporating evidence and ethical frameworks into policymaking, and navigating the interests of stakeholders, including donors, governments, and communities. By the end of the course, students will be able to influence and shape health policies and systems in diverse, global settings.

IHSD 7070 The Social Determinants of HIV/AIDS (3)

HIV/AIDS is the fifth leading cause of disease burden and the sixth leading cause of death globally. Patterns of infection serve as a vehicle for understanding social disparities. The goal of this course is to provide students with the skills to critically assess the social determinants of HIV and public health strategies to mitigate their effect on the epidemic. Students will participate in group work and individual assignments that apply concepts discussed in class and challenge students to map causal mechanisms to interventions. The course format combines readings, presentations, group activities, mini-assignments and a final paper. By completion of the course, students will gain the knowledge, skills and agency to become active participants in the global response.

IHSD 7140 Monitoring and Evaluation of HIV/AIDS Programs (3)

This course serves to: (1) increase knowledge and awareness of the context, design, and effectiveness of HIV/AIDS prevention, care and treatment programs; (2) strengthen skills in the application of methods and tools for global- and national-level monitoring and evaluation of the HIV epidemic and response. The course focuses on low and middle-income countries and addresses monitoring and evaluation (M&E) approaches for specific HIV/AIDS programmatic areas. These programmatic areas may include: HIV prevention; HIV treatment; social and behavioral change communication; community mobilization; and tuberculosis/HIV integration. Students will develop professional skills in M&E of programs to address the needs of key populations and in utilization of M&E results to prioritize options for improving the HIV/AIDS response.

Prerequisite(s): SPHL 6050*.

* May be taken concurrently.

IHSD 7200 Sustainable Human Development: Theory and Practice (3)

The purpose of this course is to gain an in-depth understanding of the origins, evolution, and characteristics of Sustainable Human Development (SHD) both in terms of formulation and implementation. SHD is a holistic approach to development, encompassing economic, political, social, and environmental issues that are interdependent and complementary. We will first present an introduction to the notion and history of global development and examine different theories and strategies that have dominated the field since the 1950s, with a particular emphasis on SHD. We will then address various thematic issues and goals of development, such as understanding multifaceted poverty, improving health and education outcomes, striving for social inclusion, addressing the many consequences of climate change, and managing today's migrations.

IHSD 7210 Using Survey Data for Population Health Research (3)

This course is intended for doctoral and advanced Masters students. The course will introduce students to key concepts and measures used in the monitoring and evaluation of global health programs. Students will gain an understanding of indicators related to population health and health services, data sources, measurements, and their strengths and limitations. This course also provides basic hands-on quantitative skills that are essential in conducting M&E exercises in health programs in LMICs. Students will learn how to use the Stata statistical software package manage and analyze survey data and to measure population health indicators. Students will also learn to interpret and present quantitative data, using graphs and tables, in ways suitable for scientific manuscripts.

Prerequisite(s): (SPHL 6050 or 6850) and (SPHL 6060 or 6860).

IHSD 7230 Development Issues, Theory and Management (3)

This course reviews major theories and debates about social, human, and economic development in the developing world. The course covers economic growth, modernization, neoliberalism, sustainable development, human development/capabilities approach, human rights, & Marxian theory/dependency schools. It also reviews critical perspectives: post-structuralism, post-colonialism, feminist theories, complexity and dynamic systems, and social innovation. Ethnographic case studies of development and global health projects reveal how assumptions and practices translate in to real-life "development" projects that can fail to address key issues and cause unintended outcomes. The readings invite us to think differently about knowledge, evidence, culture, participation, globalization, and sustainability; we consider the role of foreign aid and relevant development actors.

IHSD 7250 Sustainable Health and Development Program Design (3)

This course prepares students to design public health interventions for Low- and Middle-Income Countries, drawing from sustainable development frameworks, including the Sustainable Development Goals, case studies, and applied exercises. It explores the global health ecosystem, focusing on historical and current models, actors (donors, states, NGOs, communities), and indicators to monitor program implementation. Students will follow a scaffolded process to analyze and design interventions that are evidence-informed, culturally appropriate, and sustainable. The final product for the course is a comprehensive health intervention proposal that integrates equity, inclusion, and sustainability aspects, along with robust monitoring indicators. Weekly lectures, short assignments, and group seminars will allow for peer review and collaborative improvement of proposals.

IHSD 7300 Implementation Practice (3)

Public health programs continually implement new interventions to improve health outcomes and achieve sustainable change. This course focuses on what, why, and how interventions work in real world settings. The course builds students' knowledge of key steps and tasks needed for moving through the program implementation process: from problem exploration and root-cause analysis through intervention selection, adaptation, piloting, and testing, to using the findings to adapt the program, and developing a scale-up strategy. Students will: (a) apply a step-by-step approach to implementation research; (b) analyze factors influencing the successful adoption of health interventions; (c) describe how to carry out each phase of the implementation process; (d) analyze indicators of implementation success; and (d) propose approaches for developing a scale-up strategy.

IHSD 7340 Population Mobility and Health (3)

This course introduces students to the relationships between population mobility and health. It spans various mobile populations, including refugees, immigrants, those displaced due to conflict, climate change, and human trafficking, as well as individuals experiencing homelessness. Beyond examining the impact of political, economic, and cultural factors on mobility and health at global and local levels, each student will develop a policy brief addressing critical health challenges faced by a group experiencing displacement or some other form of mobility. The course is organized around three themes: 1) current patterns and trends in population mobility; 2) theoretical models linking different types of mobility with associated health outcomes; and 3) public health challenges to meeting routine and exceptional health needs of mobile populations. Previously listed as SBPS 7340.

IHSD 7440 Household Sampling Applications in Resource-poor Settings (3)

The course focuses on a wide variety of public health applications and is applicable to virtually all academic and professional settings where mapping is used. Each lecture begins with a PowerPoint presentation to introduce fundamental mapping concepts and is followed with in-class exercises to reinforce hands-on application. Two in-class, paper-based exams are given to monitor and assess students' understanding of the course concepts.

Prerequisite(s): (SPHL 6060* or 6860) and (SPHL 6050* or 6850).

* May be taken concurrently.

IHSD 7450 Leadership and Strategic Management for International Health and Sustainable Development (3)

This is an advanced graduate level course that equips students with leadership skills necessary for executive positions within the broad field of international health and sustainable development. Drawing from several disciplines, this course provides students with strategies, theoretical models, frameworks and tools that are adaptable to the broad scope of experience in the field, particularly as it relates to major challenges to health and sustainable development. This course also emphasizes personal leadership development and a philosophy for lifelong learning. Case studies and simulations are used to challenge students to analyze problems collaboratively and apply strategies to address real-world dilemmas faced by decision-makers. Students will be able to create strategic plans for international initiatives and build consensus to achieve organizational change.

IHSD 7990 Independent Study (1-3)**IHSD 8050 Evidence for Decision Making (3)**

This course provides an in-depth understanding of qualitative, quantitative, and mixed methods in program and policy evaluation and research. Students will learn to design and implement research projects to address public health issues at multiple levels, and critically analyze the use and limitations of surveillance systems and national surveys. The course covers experimental and quasi-experimental designs, survey data collection, qualitative methods such as phenomenology using thematic analysis, and mixed methods approaches. It also emphasizes the use of tools like DHIS2, social listening platforms, and national surveillance systems to monitor and evaluate public health interventions. Through practical assignments and case studies, students will gain the skills to design research and evaluation for public health programs in diverse global settings.

Prerequisite(s): SPHL 6050 and 6060.

IHSD 8100 Knowledge Management for Public Health Impact (3)

This course equips students with essential skills to manage and leverage knowledge for public health decision-making. Through a semester-long assignment, interactive exercises, and readings, students will explore knowledge management – a systematic process of collecting, curating information, and connecting it to the right people at the right time to increase the likelihood that information is seen, understood, and used by decisionmakers. The course prepares students to lead in addressing knowledge management challenges across diverse work settings, with attention to diversity, equity, and inclusion.

IHSD 8250 Advanced Research Methods in Global Health (3)

This course is intended for upper-level masters students interested in applied research methods and doctoral students working towards their dissertations. The focus is on providing skills for conducting program, impact or other forms of evaluation using econometric methods to analyze health, population, and nutrition data. Of particular focus will be analyses of population-based household surveys using the Stata 16.0 statistical software package. Key topics that will be covered are: research methods and designs, linear regression models with their assumptions and limitations, limited dependent variable models (logit, probit tobit, multinomial logit), instrumental variables and two-stage least squares, sample selection and censored regression models, multilevel models, propensity score matching, applications of program evaluations, and time series analysis with pooled and longitudinal data.

Prerequisite(s): (SPHL 6050, 6850 or BIOS 6030) and BIOS 6040 and (SPHL 6060, 6860 or EPID 6030).

IHSD 8300 Strategic Use of Data and Evidence in Global Health Programs and Systems (3)

This course prepares students to design and lead strategies to increase the use of data and evidence in health program design and implementation in low- and middle-income countries (LMICs). It provides students with analytical framing and in-depth understanding of drivers and barriers related to use of data and evidence through critique of real-world case examples and individual and group activities. Students will explore system-level influences on data use (e.g., digital health transformation) and will practice applying data generation and use techniques for tailoring interventions and improving program performance and equity and design a strategy or intervention to strengthen data use at the national, district or community level in an LMIC health system.

Prerequisite(s): IHSD 8050.

IHSD 8500 Systems Thinking in International Health and Sustainable Development (3)

Understanding causality within context is fundamental to relevant, effective, and sustainable evidence-based policy development and program planning. Systems are sets of elements that are joined together for a common purpose or function through feedbacks and other dynamic relationships to produce often complex behavior and sometimes unexpected outcomes when society, organizations, and nature interact in a specific context. System feedbacks help explain why outcomes persist despite external stresses, shocks, and interventions. Applying system thinking approaches can reveal how systems learn, adapt, and transform over time. This course aims to provide a comprehensive overview of systems thinking concepts and applications to equip students with the practical skills and tools necessary to lead systems thinking-informed policy development and program planning for improved.

IHSD 8990 Independent Study (1-3)