

GLOBAL DIGITAL HEALTH, CERTIFICATE

Global Digital Health Certificate

Digital health refers to the development and use of digital technologies (which includes m/eHealth, health informatics, telemedicine, data analytics, big data, artificial intelligence) utilized in and throughout health systems to improve health.

The Global Digital Health Certificate program provides concrete training - grounded in real-world challenges and informed by leading-edge scholarship - in the contexts of digital health use in low- and middle-income country settings, focused on methodology, monitoring and evaluation of digital health interventions, and digital health leadership skills.

This certificate program is for those students interested in digital health and pursuing a terminal master's program who plan to join academic, government, or private-sector employment, and for those students who plan to pursue additional advanced degrees (e.g., DrPH, PhD).

EDUCATIONAL OBJECTIVES

Upon completion of the program, individuals will be able to:

- Identify and describe key types of digital interventions applied to improve a variety of health services and the essential components for implementing digital health intervention;
- Discuss and examine the practical issues related to the implementation of digital health interventions as well as the social, political, and economic factors that influence global digital health research and priorities - this includes discussions around ethics/privacy considerations, research and evaluation methods, novel interventions, partnership building, and stakeholder engagement;
- Critically appraise technical considerations for the selection, adaptation, and implementation considerations for various digital health platforms;
- Develop requirements, data flow diagrams, and a process to conceptualize implementation of digital health interventions;
- Develop an implementation and evaluation plan for a digital health intervention, which includes explaining key reporting requirements, describing different innovative methodologies that could be utilized to evaluate such interventions, differentiating strengths and weaknesses of evaluation methods, and selecting the appropriate quantitative and qualitative data collection methods.

Sponsoring Department:

International Health (<https://publichealth.jhu.edu/departments/international-health/>)

Admissions

Complete certificate program admissions information and contact information is available on the certificate program page (<https://>

publichealth.jhu.edu/academics/global-digital-health-certificate-program/) on the Bloomberg School of Public Health website.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

The certificate program requires a minimum of 18 term credits including 7 term credits of core required courses for the Global Digital Health Certificate program. Additionally, students must take a minimum of 3 credits from each of the following focal areas: Methods & Skills, Health Informatics, and Leadership & Management. After completing these 16 term credit requirements, students may opt to complete the remaining credits amongst any of the focal areas.

All certificate coursework must be taken for a letter grade, a minimum grade of C must be earned in all certificate coursework, and a 2.75 or better overall GPA for all certificate coursework is required. The certificate program length is flexible; it varies from student to student, however, the certificate must be completed within three years.

The student should review the section of the website that addresses completion (<https://publichealth.jhu.edu/academics/certificate-programs/requirements-for-successful-completion-of-a-certificate-program/>) before completing certificate program requirements. The student's transcripts will not indicate that the certificate was earned until the Notification of Completion has been submitted, verified by the certificate program, and processed by the Registrar.

COURSE OF STUDY

Please note: The Global Digital Health Certificate program will not approve any course substitutions or waivers. The curriculum indicated below cannot be altered in any way for individual students.

Students should check the BSPH course directory (<https://www.jhsph.edu/courses/>) to confirm when the course is offered, and students should also check for pre-requisites and whether instructor consent is required.

Code	Title	Credits
Core Courses: All are required		
PH.223.621	Design and Implementation of Global Digital Health interventions	
PH.223.622	Design and Implementation of Global Digital Health Interventions II	
PH.223.626	Special Topics in Global Digital Health	
<i>Methods & Skills - minimum 3 credits</i>		
PH.224.689	Health Behavior Change At the Individual, Household and Community Levels	
PH.221.645	Large-scale Effectiveness Evaluations of Health Programs	
PH.223.664	Design and Conduct of Community Trials	
PH.221.638	Health Systems Research and Evaluation in Developing Countries	
PH.224.692	Methods in Formative Research and Human Centered Design for Intervention Development	
PH.221.654	Systems Thinking in Public Health: Applications of Key Methods and Approaches	
PH.410.654	Health Communication Programs I: Planning and Strategic Design	
PH.410.752	Children, Media, and Health	

PH.410.655	Health Communication Programs II: Implementation and Evaluation	PH.330.620	Qualitative and Quantitative Methods for Mental Health and Psychosocial Research in Low Resource Settings	3
PH.330.606	Digital and Mobile Health Research in Public Mental Health	PH.410.712	Theory and Practice in Qualitative Data Analysis and Interpretation for The Social and Behavioral Sciences	3
PH.309.635	Population Health: Analytic Methods and Visualization Techniques			
<i>Health Informatics - minimum 3 credits</i>				
PH.221.637	Health Information Systems			
PH.309.631	Population Health Informatics			
PH.312.633	Health Management Information Systems			
<i>Leadership & Management - minimum 3 credits</i>				
PH.221.602	Applications in Managing Health Organizations in Low and Middle income Countries			
PH.221.722	Quality Assurance Management Methods for Developing Countries			
PH.221.712	Leadership & Management in Humanitarian Health			
PH.410.622	Strategic Leadership Principles and Tools for Health System Transformation in Developing Countries			
PH.312.600	Managing Health Services Organizations			
PH.221.608	Managing Non-Governmental Organizations in the Health Sector			
ME.250.958	Digital Health Innovation & Regulatory Science			

Recommended Courses

There are several courses that we recommend students take as it will provide further analytical training that would support and bolster their training in global digital health. These courses are focused around qualitative and quantitative methodologies related to biostatistics and epidemiology.

Code	Title	Credits
PH.140.621	Statistical Methods in Public Health I	4
PH.140.622	Statistical Methods in Public Health II	4
PH.140.623	Statistical Methods in Public Health III	4
PH.140.624	Statistical Methods in Public Health IV	4
PH.140.651	Methods in Biostatistics I	4
PH.140.652	Methods in Biostatistics II	4
PH.140.653	Methods in Biostatistics III	4
PH.140.654	Methods in Biostatistics IV	4
PH.340.601	Principles of Epidemiology	5
PH.340.721	Epidemiologic Inference in Public Health I	5
PH.340.722	Epidemiologic Inference in Public Health II	4
PH.340.770	Public Health Surveillance	3
PH.340.751	Epidemiologic Methods 1	5
PH.340.752	Epidemiologic Methods 2	5
PH.340.753	Epidemiologic Methods 3	5
PH.340.769	Professional Epidemiology Methods	4
PH.550.604	Qualitative Reasoning in Public Health	2
PH.552.603	The Role of Qualitative Methods and Science in Describing and Assessing a Population's Health	0.5
PH.224.690	Qualitative Research Theory and Methods	3
PH.224.691	Qualitative Data Analysis	3