# IMPLEMENTATION SCIENCE AND RESEARCH PRACTICE, CERTIFICATE

# **Implementation Science and Research Practice Certificate Program**

NOTE: This certificate program may be completed entirely online!

OVERVIEW

Implementation Science is the study of methods to promote the adoption, integration, and sustainment of evidence-based practices, interventions or policies into practice.

The program is designed for full-time students and part-time working professionals who wish to deepen their knowledge about implementation science and develop related skills. Graduates will be able to translate research findings into routine practice and evidence-based practices to improve the quality and effectiveness of healthcare services and will have a greater appreciation of how to conduct implementation science-based research. Candidates interested in pursuing expertise in implementation science research or public health practitioners and implementers interested in integrating research into their practice or partnering with researchers to design studies are likely to benefit from this certificate program.

#### **EDUCATIONAL OBJECTIVES**

The overall certificate educational objectives are as follows:

- Identify the relevant nomenclature and disciplines that contribute to implementation research and practice to develop future implementation projects.
- Apply key implementation science constructs and theories to public health problems.
- Identify a range of methods, study designs and evaluation approaches that can be used to answer implementation science questions.
- 4. Evaluate the relevance of study designs used for efficacy, effectiveness, and implementation research.

Additionally, there are track-specific objectives that further hone expertise in at least one sub-area:

For the Implementation Strategies track

- Identify key hallmarks of implementation strategy specification and apply these across different contexts.
- Demonstrate knowledge of how to measure outcomes of implementation strategies.

For the Policy & Translation track

- Describe the elements that make a health project or policy effective and critique designs and materials used by actual health interventions.
- Discuss the steps involved in developing, implementing and evaluating health policies or guidelines.

3. Identify the roles public health research can play in informing program and policy decisions and ways to make research more applicable.

For the Methods & Study Design track

- Identify and document key objectives and answerable evaluation research questions that meet key stakeholders' needs and are appropriate for program and setting.
- 2. Propose a technically-sound design for evaluating the impact of program, focusing on key evaluation questions.
- Understand which evaluation and study designs are best suited to different research and public health questions and given available resources.

#### SPONSORING DEPARTMENT

Epidemiology (https://publichealth.jhu.edu/departments/epidemiology/)

#### **ADMISSIONS**

Contact information and complete admissions information are available on the certificate program page (https://publichealth.jhu.edu/academics/implementation-science-and-research-practice-certificate-program/) on the Bloomberg School of Public Health website.

## **Requirements for Successful Completion**

Students will be required to successfully complete a minimum of 18 didactic credits, including 9 required course requirements and a minimum of 9 track credits. Students will need to focus on one track and are not permitted to select courses across all 3 tracks. However, students may substitute one course from another track in order to meet the 18 credit certificate minimum if necessary. No internship or capstone will be required.

Note: If a student takes the 2 credit Summer Institute required course that results in only 8 required credits, they will need to take 10 elective credits to reach 18 total credits.

All required and elective courses must be taken for a letter grade; a minimum grade of C is required in all certificate coursework, and students must maintain a 2.75 or better overall GPA for all certificate coursework. The certificate program length is flexible and varies from student to student. However, for non-JHU degree-seeking students, the program 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 transcript 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**

Students should check the Bloomberg School course directory (https://www.jhsph.edu/courses/) to confirm in which term and modality the courses are offered. Students should also check for prerequisites and whether instructor consent is required.

Code Title Credits

PH.550.860 Academic & Research Ethics at BSPH

Required Courses:

PH.550.601	Implementation Research and Practice	3	
PH.330.650	Methods in Implementation Science	3	
PH.340.726	Implementation Research Methods to Address Real World Epidemiological Questions	3	
Additional Required Course Option:			
PH.340.716	Implementation Science Concepts, Methods & Study Designs (Course may be substituted for PH 550.601 Implementation Research and Practice)	2	
Track 1: Impleme	ntation Strategies (At Least 9 Credits Needed)		
PH.221.661	Project Development for Primary Health Care in Developing Countries	4	
PH.221.700	Public Engagement Practices for Scientists (Peps) in International Settings	2	
PH.221.722	Quality Assurance Management Methods for Developing Countries	4	
PH.410.630	Implementation and Sustainability of Community- Based Health Programs	3	
Track 2: Policy an	d Translation (At Least 9 Credits Needed)		
PH.410.622	Strategic Leadership Principles and Tools for Health System Transformation in Developing Countries	4	
PH.410.654	Health Communication Programs I: Planning and Strategic Design	4	
PH.410.655	Health Communication Programs II: Implementation and Evaluation	4	
PH.410.668	Policy Interventions for Health Behavior Change	3	
PH.410.721	Translating Research into Public Health Programs and Policy	3	
Track 3: Methods and Study Design (At Least 9 Credits Needed)			
PH.140.664	Causal Inference in Medicine and Public Health I	4	
PH.221.637	Health Information Systems	3	
PH.221.645	Large-scale Effectiveness Evaluations of Health Programs	4	
PH.221.654	Systems Thinking in Public Health: Applications of Key Methods and Approaches	3	
PH.224.690	Qualitative Research Theory and Methods	3	
PH.224.691	Qualitative Data Analysis	3	
PH.224.692	Methods in Formative Research and Human Centered Design for Intervention Development	4	
PH.300.713	Research and Evaluation Methods for Health Policy	3	
PH.309.600	Evaluating Quality Improvement and Patient Safety Programs	3	
PH.309.616	Introduction to Methods for Health Services Research and Evaluation I	2	
PH.309.617	Introduction to Methods for Health Services Research and Evaluation II	2	
PH.309.635	Population Health: Analytic Methods and Visualization Techniques	3	
PH.380.611	Fundamentals of Program Evaluation	4	
PH.390.675	Outcomes and Effectiveness Research	3	
PH.410.710	Concepts in Qualitative Research for Social and Behavioral Sciences	3	
PH.410.631	Introduction to Community-Based Participatory Research: Principles and Methods	3	

PH.410.635	Applications of innovative Methods in Local and	4
	Global Health Equity Research	