

HEALTHCARE EPIDEMIOLOGY AND INFECTION PREVENTION AND CONTROL

Healthcare Epidemiology and Infection Prevention and Control

OVERVIEW

The certificate is designed for masters and doctoral students at The Johns Hopkins University and junior and mid-level professionals with an interest in gaining exposure to the expertise and skills utilized by healthcare epidemiologists and infection preventionists. Healthcare epidemiologists and infection preventionists aim to prevent and control healthcare-associated infections, antimicrobial resistant and epidemiologically significant organisms and other adverse outcomes in the healthcare setting by translating research into practice.

Their expertise and activities include epidemiologic and laboratory investigation, surveillance for infections and antimicrobial resistant or significant organisms, policy development and implementation, education and information dissemination, implementation of interventions to prevent transmission or infectious complications, cost-benefit analyses of interventions, and patient-oriented research to inform and improve the science of healthcare epidemiology and infection control and to improve quality-of-care.

EDUCATIONAL OBJECTIVES

Upon completion of the certificate program, students will be able to:

1. Demonstrate use and mastery of specific methods relating to hospital epidemiology including surveillance (traditional and computerized), outbreak management, communicable diseases, antibiotic management and resistance, occupational health, quality and performance improvement, patient safety, and ethical considerations.
2. Utilize clinical research study designs as applied to healthcare epidemiology research including, outcomes measurement, risk factor assessment, semi-quantitative methods, survey methods, and qualitative research.
3. Discuss relevant thematic topics including isolation precautions and hand hygiene, infection control in special populations, healthcare system preparedness, and environmental aspects of infection control.
4. Work within groups to design studies, collect data, and effectively communicate results to clinicians and researchers from various disciplines through framing problems scientifically, determining preferred research methods, designing appropriate data collection methods, performing statistical analyses, and interpreting findings.

CONTACT INFORMATION

Sponsoring Department:

Department of Epidemiology (<https://www.jhsph.edu/departments/epidemiology/>)

Certificate Program Contact:

Sheila Small
ssmall2@jhu.edu

Faculty Sponsor:

Poonum S. Korpe, MD (<https://www.jhsph.edu/faculty/directory/profile/3093/poonum-s-korpe/>)

ELIGIBILITY

The certificate program is open to masters and doctoral students currently enrolled in any division of The Johns Hopkins University. It is also offered to non-degree students with at least a baccalaureate degree in medicine, nursing or microbiology from an accredited college or university and a strong record of successful academic performance.

ADMISSIONS PROCESS

All applicants must review the General Certificate Guidelines page (<http://e-catalog.jhu.edu/public-health/certificates/#newitemtext>), which provides important information about how to apply to a certificate program.

APPLYING TO THE CERTIFICATE PROGRAM AS A JHU GRADUATE STUDENT

Students already enrolled in a graduate program at JHU are not required to submit the School's electronic admissions application, but must submit a letter of interest, CV/resumé, and anticipated course schedule (http://e-catalog.jhu.edu/public-health/certificates/Anticipated_Course_Schedule_5-28-2020.pdf) to Certificate Program Contact (franburman@jhu.edu) prior to starting coursework.

Start terms: It is possible to begin the certificate program only in term 1.

APPLYING TO THE CERTIFICATE PROGRAM AS A NON-DEGREE STUDENT

Students who are not currently enrolled in a graduate program at JHU are required to apply to certificate programs using SOPHAS Express (<https://sophasexpress.liaisoncas.com/applicant-ux/#/login>). All non-degree applicants should review the general Certificates Admissions (<http://e-catalog.jhu.edu/public-health/certificates/#newitemtext>) page for instructions on how to apply to a certificate program and application deadlines.

Start terms: It is possible to begin the certificate program only in term 1.

TOEFL/IELTS: Required.

Prerequisites or special requirements: None

REQUIREMENTS FOR SUCCESSFUL COMPLETION

The certificate requires a minimum of 18 term 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; however, the certificate must be completed within three years.

The student should review the section of the website that addresses completion (<http://e-catalog.jhu.edu/public-health/certificates/#courserequirementstext>) 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

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

Code	Title	Credits
PH.550.860	Academic & Research Ethics at JHSPH (All students are required to complete this noncredit course in their first term of study)	

Required courses: Students must complete the following required courses (see footnote)

Introductory Epidemiology Requirement: Students must complete either 340.601 or 340.721

PH.340.601	Principles of Epidemiology	5
PH.340.721	Epidemiologic Inference in Public Health I	5

Students must complete the following required course:

PH.340.641	Healthcare Epidemiology	4
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Core Courses: Students must complete at least two of the following core courses

PH.340.612	Epidemiologic Basis for Tuberculosis Control	2
PH.340.627	Epidemiology of Infectious Diseases	4
PH.340.653	Epidemiologic Inference in Outbreak Investigations	3

Elective Courses: Students must complete the 18 credit requirement through the following elective courses

PH.182.625	Principles of Occupational and Environmental Hygiene	4
PH.221.637	Health Information Systems	3
PH.306.663	Legal and Ethical Issues in Health Services Management	3
PH.309.730	Patient Safety and Medical Errors	3
PH.317.600	Introduction to the Risk Sciences and Public Policy	4
PH.410.755	Health Communication Programs	4

Footnote:

JHSPH degree students who earn at least a B grade in one introductory epidemiology and one introductory biostatistics course may use these credits to fulfill the introductory epidemiology requirement; however, they will only be allowed to apply six credits from these courses toward the certificate. They must complete the 4-credit Healthcare Epidemiology course and at least 8 credits of core and elective courses.

Non-degree students may waive the introductory epidemiology requirement by providing a transcript from another institution demonstrating successful completion of at least one graduate level course in epidemiology and one in biostatistics. These students will still be required to complete the Healthcare Epidemiology course (4 credit units) and at least 14 credit units of core and elective courses.