

PHARMACOEPIDEMOLOGY AND DRUG SAFETY

Pharmacoepidemiology and Drug Safety Certificate OVERVIEW

The Certificate Program in Pharmacoepidemiology and Drug Safety is designed for masters and doctoral degree students enrolled at Johns Hopkins Bloomberg School of Public Health and in other Johns Hopkins University divisions, including the Schools of Medicine and Nursing and the Krieger School of Arts and Sciences. It is also designed for early and mid-career public health professionals who wish to expand their knowledge of pharmacoepidemiology and drug safety to inform their work in academic, regulatory, or industry settings.

EDUCATIONAL OBJECTIVES

This certificate program will provide learners with core knowledge of pharmacoepidemiology and drug safety, as well as insights from these fields that can inform the work of policy-makers, patients, clinicians and payers seeking to improve the quality and safety of medication use. Upon completion of the core courses required for the Pharmacoepidemiology certificate program, participants will have the ability to:

1. Identify the processes of drug development;
2. Explain key requirements in biomedical product regulation and their rationale;
3. Participate in the design of studies, both observational and experimental, to assess the effectiveness of drugs;
4. Employ techniques to study the patterns and determinants of drug utilization;
5. Apply approaches to examine drug safety as well as the detection of adverse drug events.

CONTACT INFORMATION

Certificate Program Contact

Sheila Small
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Faculty Sponsor

G. Caleb Alexander, MD, MS (<https://www.jhsph.edu/faculty/directory/profile/2761/caleb-alexander/>)

Co-Sponsor

Jodi Segal, MD, MPH (<https://www.jhsph.edu/faculty/directory/profile/2132/jodi-beth-segal/>)

ELIGIBILITY

The certificate program is open to currently enrolled masters and doctoral students at The Johns Hopkins University, with the exception of JHSPH MAS students, who are not eligible to apply until they have completed their primary degree program. It is also offered to non-degree students with at least a baccalaureate degree from an accredited college or university, a strong record of successful academic performance, and a minimum of three years (full-time equivalent) of professional experience in a related health care field.

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 and anticipated course schedule (http://e-catalog.jhu.edu/public-health/certificates/Anticipated_Course_Schedule_5-28-2020.pdf) to Certificate Program Contact (ssmall2@jhu.edu) prior to starting coursework.

Start terms: It is possible to begin the certificate program only in these terms: Summer, 1, 2, 3, & 4.

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 these terms: Summer, 1,2,3, & 4.

TOEFL/IELTS: Required.

Prerequisites or special requirements: Applicants must have three (3) years of professional health care experience in a related field.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

The certificate requires a minimum of 20 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; 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 (<http://e-catalog.jhu.edu/public-health/certificates/#courserrequirementsstext>) 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 JHSPH course directory (<https://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 take one of the following Epidemiology Series* * Non-degree students may waive the Epidemiology series 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 must still complete a minimum of 20 term credits of required, core, and elective certificate program coursework. * Bloomberg Degree Students who earn at least a B in one introductory epidemiology (340.601, 340.721 or 340.751) and one biostatistics course (140.611, 140.621, 140.651, or 140.751) may use these courses to fulfill the Epidemiology series requirement

In Series A, students may choose between either 340.601 or 340.721, and they must also complete 340.722

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

In Series B, students must complete both 340.751 and 340.752

PH.340.751	Epidemiologic Methods 1	5
PH.340.752	Epidemiologic Methods 2	5

Required Courses: Students must also complete the following course:

PH.340.645	Introduction to Clinical Trials	3
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Core Courses: Students must take at least 2 of the following 3 courses:

PH.340.682	Pharmacoepidemiology Methods	3
PH.340.684	Pharmacoepidemiology: Drug Utilization	3
PH.390.631	Principles of Drug Development	2

Elective Courses: Students complete the 20 credit requirement by selecting among the following:

PH.140.633	Biostatistics in Medical Product Regulation	2
PH.140.664	Causal Inference in Medicine and Public Health I	4
PH.140.665	Causal Inference in Medicine and Public Health II	3
PH.221.610	Pharmaceuticals Management for Under-Served Populations	3
PH.308.630	U.S. Pharmaceutical Policy	3
PH.317.600	Introduction to the Risk Sciences and Public Policy	4
PH.317.610	Risk Policy, Management and Communication	3
PH.340.617	Pharmacoepidemiology (NB: This course is only appropriate for the certificate program if 340.682 was not taken.)	2
PH.340.722	Epidemiologic Inference in Public Health II	4
AS.410.651	Clinical Development of Drugs and Biologics	4