

RISK SCIENCES AND PUBLIC POLICY

Risk Sciences and Public Policy Certificate Program

OVERVIEW

Risk professionals are under increased pressure to interpret complex environmental and health situations in creative ways. The certificate program provides multidisciplinary education designed to increase awareness of the scientific underpinnings of risk assessment and provide a bridge between science and policy that allows innovative public health solutions to complex problems. Risk assessment methods are applied to address a wide range of environmental and public health issues including chemical, microbiological, radiological exposures, natural and man-made disasters, and to evaluate new technologies. Risk assessors are employed in academic, governmental and non-governmental organizations across multiple sectors such as agriculture, energy, environmental protection, armed forces, public health, and transportation.

EDUCATIONAL OBJECTIVES

Upon conclusion of the Risk Sciences and Public Policy certificate program, the student will:

1. Be able to describe the importance of risk assessment in examining public health problems;
2. Be able to describe the methods of risk assessment and their applicability to public health problems;
3. Be able to discuss the scientific basis for assessing environmental and other public health risks;
4. Be able to complete and document a basic quantitative risk assessment for a chemical exposure;
5. Be familiar with the policy implications of the scientific relationships for reducing public health risks.

CONTACT INFORMATION

Sponsoring Departments

Health Policy and Management (<http://www.jhsph.edu/dept/hpm/>)
Environmental Health and Engineering (<https://ehe.jhu.edu/>)
Epidemiology (<http://www.jhsph.edu/dept/epi/>)

Certificate Program Contact

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Faculty Sponsor

Mary Fox, PhD (<https://www.jhsph.edu/faculty/directory/profile/1610/mary-a-fox/>)

Faculty Co-Sponsor

Keeve Nachman, PhD (<https://www.jhsph.edu/faculty/directory/profile/2394/keeve-e-nachman/>)

ELIGIBILITY

This certificate program is open to research scientists interested in bridging science and policy; public and private sector professionals who evaluate scientific data in the context of risk assessment and management; decision makers and risk-mangers, such as regulators, corporate executives, elected officials, economists, engineers, and lawyers; and those responsible for communicating risk, such as lobbyists, journalists, and non-governmental organizations. The certificate is also intended for students enrolled in any JHU graduate degree program, with the exception of the JHSPH MAS program, as well as students enrolled in the Johns Hopkins University undergraduate public health degree program.

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 declaration of intent (http://e-catalog.jhu.edu/public-health/certificates/risk-sciences-and-public-policy/Risk_Intent_Form.pdf) prior to starting coursework. Priority deadline to submit intent is October 1; Final deadline is December 1.

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

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: 1 & 3.

TOEFL/IELTS: Not required.

Prerequisites or special requirements: None

REQUIREMENTS FOR SUCCESSFUL COMPLETION

The certificate program requires a minimum of 26 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 program 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/#courserequirements>) (<http://www.jhsph.edu/academics/certificate-programs/completion.html>) 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

The core curriculum consists of four core risk assessment and policy courses as well as three risk science courses that will introduce you to methods of risk assessment and its applications to public policy.

Students should check the JHSPH course directory (<https://www.jhsph.edu/courses/>) to confirm when the courses are offered. 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

PH.317.600	Introduction to the Risk Sciences and Public Policy	4
PH.317.605	Methods in Quantitative Risk Assessment	4
PH.317.610	Risk Policy, Management and Communication	3
PH.317.615	Topics in Risk Assessment	2

In addition to the four core courses, students must also take three risk sciences courses, including Public Health Toxicology, one course in Epidemiology and one course in Biostatistics

PH.187.610	Public Health Toxicology	4
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Students must select one of the following courses in epidemiology:

PH.340.601	Principles of Epidemiology	5
PH.340.680	Environmental and Occupational Epidemiology	4
PH.340.688	PRACTICAL EPIDEMIOLOGY FOR BASIC SCIENTISTS	3
PH.340.721	Epidemiologic Inference in Public Health I	5
PH.340.722	Epidemiologic Inference in Public Health II	4
PH.340.751	Epidemiologic Methods 1	5
PH.340.769	Professional Epidemiology Methods	4

To satisfy the Biostatistics requirement, students must select either (140.612 and 140.613), or 140.616, or 140.622, or 280.345

PH.140.612	Statistical Reasoning in Public Health II (please note course prerequisites; course must be taken with 140.613)	3
PH.140.613	Data Analysis Workshop I (course must be taken with 140.612)	2
PH.140.622	Statistical Methods in Public Health II	4
PH.140.616	Statistics for Laboratory Scientists II	4
AS.280.345	Public Health Biostatistics (This is an undergraduate level course offered at the Johns Hopkins University's Krieger School of Arts and Sciences campus. The course is an acceptable course only for those Johns Hopkins University undergraduates who are accepted into the Risk Sciences and Public Policy certificate program.)	4

Optional Data Analysis Supplement Option for Students who Complete 140.612 Statistical Reasoning in Public Health:

PH.340.701	Epidemiologic Applications of Gis	2
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