

# SPATIAL ANALYSIS FOR PUBLIC HEALTH, CERTIFICATE

## OVERVIEW

**Please note: this program can ONLY be completed via fully online courses.**

The Johns Hopkins Bloomberg School of Public Health offers fully online, part-time master's degree and certificate programs, designed for working professionals. Our Online Programs for Applied Learning (<https://publichealth.jhu.edu/academics/academic-program-finder/applied-learning-programs/>) (OPAL) focus on emergent industry sectors that have a resounding need for highly skilled professionals, with one of these sectors being Global Health.

Spatial analysis is an emerging field with applications evolving that are vast and paramount, impacting public health at the local and global levels. The carefully sequenced courses of the certificate program in Spatial Analysis for Public Health introduce and reinforce a unifying comprehensive spatial science paradigm to include components of Spatial Data, GIS and Spatial Statistics.

## EDUCATIONAL OBJECTIVES

Upon completion of the certificate program in Spatial Analysis for Public Health the individual will be able to:

1. Synthesize how geography affects public health;
2. Obtain and transfer information from spatial data technologies into a database appropriate for mapping;
3. Utilize a geographic information system to map and spatially integrate public health-related databases;
4. Analyze maps using tools from the field of spatial statistics to describe and interpret distributions of health outcomes in a population;
5. Design and implement a spatial analysis protocol for addressing a public health problem.

## LinkedIn® Group

We have established a LinkedIn group for each of the OPAL program areas in order to strengthen connections between current students, faculty, and alumni of OPAL programs, as well as to facilitate student-to-student peer networking.

Participation is voluntary, but we encourage you to join this professional networking community.

BSPH OPAL Spatial Analysis for Public Health ([https://www.linkedin.com/uas/login/?session\\_redirect=https%3A%2F%2Fwww.linkedin.com%2Fgroups%2F8676099%2F](https://www.linkedin.com/uas/login/?session_redirect=https%3A%2F%2Fwww.linkedin.com%2Fgroups%2F8676099%2F))

## Additional Public Health Learning Resources

The Mid-Atlantic Regional Public Health Training Center provides links to many of its online learning resources, as well as external resources, databases, and public health organizations. These can be used to supplement learning on a particular topic or provide background material. Many of these resources are available for free via their website ([https://www.jhsph.edu/research/centers-and-institutes/mid-atlantic-public-health-training-center/training\\_events/online\\_training.html](https://www.jhsph.edu/research/centers-and-institutes/mid-atlantic-public-health-training-center/training_events/online_training.html)).

The Welch Medical Library at Johns Hopkins has many resources related to research, writing, and documentation on its YouTube channel (<https://www.youtube.com/c/WelchMedicalLibrary/>).

The School has a number of research and practice-related seminar series (<https://publichealth.jhu.edu/academics/lecture-series/>) that occur throughout the year and contribute to the intellectual community of the School, for students, staff, and faculty. The Bloomberg School has a website (<https://publichealth.jhu.edu/practice/resources-for-practitioners/>) that provides some additional resources for practitioners as well.

Practitioners can also access dozens of courses from Bloomberg School faculty on Coursera (<https://www.coursera.org/jhu/>). Practice-focused offerings include courses on topics such as gun violence, food systems, health equity, biostatistics, and epidemiology, among others.

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## Admissions

Contact information and complete information about applying to the certificate program are available on the certificate program page (<https://publichealth.jhu.edu/academics/spatial-analysis-for-public-health-certificate-program/>) on the Bloomberg School of Public Health website.

## Program Requirements

Students should follow the plan outlined below if they wish to complete the Certificate program in one year. Courses can be taken at a slower pace if needed, so long as course prerequisites are met. Students should check the course directory (<http://www.jhsph.edu/courses/>) to confirm when the courses are offered for students in OPAL programs.

The certificate program requires a minimum of 18 term credits and a minimum grade point average (GPA) of 2.75. Students must earn a minimum grade on a set of required program-specific core courses: "Pass" for courses offered only on a pass/fail basis; "C" or higher for courses offered for letter grading. The certificate program length is flexible; it can be completed in as little as one year and must be completed within three years.

## Course of Study

Course	Title	Credits
<b>First Year</b>		
<b>First Term</b>		
PH.550.860	Academic & Research Ethics at BSPH	
PH.601.731	Spatial Analysis for Public Health	4
<b>Credits</b>		<b>4</b>
<b>Second Term</b>		
PH.601.732	Spatial Data Technologies for Mapping	4
<b>Credits</b>		<b>4</b>
<b>Third Term</b>		
PH.601.733	Applied Spatial Statistics	4
PH.601.805	Spatial Analysis Journal Club	2
<b>Credits</b>		<b>6</b>

**Fourth Term**

PH.601.734	Spatial Applications	4
<b>Credits</b>		<b>4</b>
<b>Total Credits</b>		<b>18</b>

## Notification of Certificate Program Completion

Students in OPAL certificate programs must contact the OPAL program office **before the end of the add/drop period of the term of the last certificate course**; certificate program completions cannot be processed retroactively.

The certificate cannot be granted or included in the transcript until the form is submitted and verified by the certificate program (OPAL Office). Certificates will be ordered for students approximately one month after the end of the term in the summer, spring, and fall. Please **contact OPAL-Office@jhu.edu** by the deadline noted above.