



Masters of Applied Science (MAS) & Certificates Student Handbook 2025-2026

Contains information for students matriculating in Academic Year 2025 – 2026

The MAS Program Office reserves the right to change existing rules and/or policies at any time. Students will be notified of any changes.

Master of Applied Science (MAS) & Certificates Student Handbook

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General Information

Academic Leadership and MAS Administration

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MAS and Certificate in Population Health Management

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MAS and Certificate in Spatial Analysis for Public Health

Program Co-Directors

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Academic Staff and Faculty

Several administrative staff and faculty members within the MAS Office help oversee and facilitate the academic programs. They are available to help you navigate the program and the school. The following information is intended to help you understand the roles of each person.

Ira Gooding (MAS Director): Responsible for the management and oversight of all MAS academic programs.

Christina Potter (Academic Program Manager): Oversees administrative operations of academic programs in MAS. Liaison between students, faculty, and administrative offices. Manages graduation processing for MAS students, program extension requests and other special exceptions.

Aidan White (Sr. Academic Program Coordinator): Supports students with day-to-day questions and issues related to their MAS program, including registration processes, calendar deadlines and course sequencing.

Morgan Fredericks (MAS Admissions Officer): Serves as recruiting coordinator for MAS programs and primary point of contact for prospective MAS students as they consider applying and work through the process in SOPHAS.

MAS Executive Committee

The MAS Academic Programs are governed by the MAS Executive Committee which is designed to approve relevant policies and procedures and ensure that these are fairly and clearly administered and enforced to protect the interests of students and the overall integrity of the programs. This committee's members are as follows:

David Baker , MAS Program Co-Director – Population Health Management	Jessica Jones , Director of Admissions – Processing and Systems, Johns Hopkins Bloomberg School of Public Health
Mark Bittle , MAS Program Co-Director – Population Health Management, MAS Instructor	Sukon Kanchanaraksa , Senior Scientist, Director of the Center for Teaching & Learning, Johns Hopkins Bloomberg School of Public Health
Lauren Black , Director of Recruitment & Events, Johns Hopkins Bloomberg School of Public Health	Christina Potter , MAS Academic Program Manager
Aruna Chandran , Senior Scientist, MAS Instructor	Cristina Salazar , Academic Program Manager and Instructor – International Health, Johns Hopkins Bloomberg School of Public Health
Frank Curriero , MAS Program Co-Director – Spatial Analysis for Public Health, MAS Instructor	Tim Shields , Program Co-Director – Spatial Analysis for Public Health, MAS Instructor
Ira Gooding , MAS Director, MAS Instructor	Albert Wu , Program Director – Patient Safety & Healthcare Quality, MAS Instructor
Kimberly Herl , Associate Director of Finance, Johns Hopkins Bloomberg School of Public Health	

Policy and Procedure Memorandum (PPM) for Online Programs in Applied Learning

MAS degree and certificate programs are governed by the [MAS PPM](#), found in the Bloomberg School portal.

Student Information and Policies

Students must read the [BSPH Student Policies](#) and familiarize themselves with the contents. This section of the Student Handbook highlights some important student policy topics and specific MAS Office procedures. **Please note that these MAS procedures DO NOT replace the BSPH student policies.**

Introduction to Online Learning

To be eligible to take an online course, students must complete the [Introduction to Online Learning](#) (IOL), offered by the Bloomberg School of Public Health in [CoursePlus](#). This non-credit mini course is a pre-requisite for all online courses offered by the School and must be completed prior to the start of the first term of matriculation in your academic program.

Since the School does not permit conditional and/or concurrent enrollment (that is, you must take Introduction to Online Learning before enrolling in an online class), we require all incoming students to take this non-credit course prior to term 1 of Academic Year 26-25, when they begin their program. For course dates and enrollment information, please visit the [CoursePlus](#) website. **If students have not completed the IOL course prior to the start of first term courses, they will not be able to access course content on the first day of class and may not be able to begin the program as expected.**

Code of Academic Ethics

The faculty and students at the Bloomberg School of Public Health have the joint responsibility for maintaining academic integrity and guaranteeing the high standard of conduct of this institution.

Students enrolled in the Bloomberg School of Public Health assume an obligation to conduct themselves in a manner appropriate to The Johns Hopkins University's mission as an institution of higher education. A student is obligated to refrain from acts which they know, or under the circumstances have reason to know, impair the academic integrity of the University. Violations of academic integrity include, but are not limited to, cheating; plagiarism; knowingly furnishing false information to any agent of the University for inclusion in the academic record; violation of the rights and welfare of animal or human subjects in research; and misconduct as a member of either School or University committees or recognized groups or organizations.

The Academic Ethics Code is contained in the school's Policy and Procedure Memorandum, Students – 1. This can be accessed through the schools [website](#).

All students will be automatically registered for and must complete the school's online, not-for-credit course entitled: Academic and Research Ethics (550.860) during their first term of registration. See the next section for additional information about the course.

To be approved for graduation, the student must have any outstanding charges of misconduct and violations of academic ethics resolved.

All students in an MAS or Certificate program need to read and follow this code. Failure to adhere to the academic ethics code may result in dismissal from the program, department, and/or school.

For issues or concerns on matters related to academic integrity, please contact Professor Jon Vernick (jvern1@jhu.edu), Director, Office of Academic Integrity (Office HH 594; Tel: 410-955-7982).

Academic and Research Ethics (ARE) Requirement

As noted above, all Master's students are required to take the course **550.860 Academic and Research Ethics (ARE)**. This is an online course for 0 credits that every student is required to take in their first term of matriculation. Students will automatically be enrolled in the course by the Registrar before first term.

The course can be accessed via [CoursePlus](#) and all students will receive notice of their registration from the [Office of Records and Registration](#). **Students who do not complete the course during their first term of registration will be blocked from registration for courses in the subsequent term.**

The course instructs students on the terms of the academic ethics code and proper conduct of research, and it includes short quizzes which students must pass to be in good standing.

The online ethics course (550.860) can be accessed at: <http://courseplus.jhsph.edu/> under the listing of Extradepartmental Courses.

If you need assistance regarding the ARE course once registered, please contact AREHelp@jhu.edu.

Standards of Academic Performance

Letter grades must be earned in all courses used to satisfy requirements, unless otherwise specified (such as pass required for Seminars in Public Health). Please note that courses may be counted only once to fulfill requirements. Students must maintain Satisfactory Academic Progress (SAP) toward obtaining their degree or certificate; receive satisfactory grades of "C" or higher in all required courses and continuously maintain a cumulative Grade Point Average (GPA) of at least 2.75 to remain a degree candidate in good standing. **Any student who receives a "D" or "F" in a required course must repeat the course and achieve a grade of "C" or better.** All earned grades will contribute to overall GPA calculation, even if a course is repeated.

Any student not meeting these standards will be placed on probationary status. Students must attempt to repeat the courses with insufficient grades when they are next offered (typically in the same term in following academic year for most MAS courses). In cases where conditions are imposed, the Committee will specify the maximum time allowed for satisfaction of the conditions. Failure to satisfy these conditions may result in termination from the program.

If students receive Federal Loans administered through the [Financial Aid Office](#) there are other academic standards that students must abide by in order to comply with Federal Loan disbursement. Students should contact that office to verify any impact incomplete or failed courses may have on their loans.

Time of Completion Requirement

The MAS programs are designed to be completed in two years, but students have up to four years to finish all program requirements if that is a better timeline for them. **Students receiving federal financial aid should follow the two-year completion plan for their degree program to maintain the minimum credits per term for eligibility.**

The MAS Certificate programs are designed to be completed in one year, but students have up to three years to finish all program requirements if that is a better timeline for them.

Students who are approaching their deadline and feel that they are unable to successfully complete all remaining program requirements within three or four years, for the certificate or MAS program

respectively, should reach out to their Academic Advisor and the MAS Office (MAS-Office@jh.edu) to discuss scheduling and any options or next steps.

Registration

Students must enroll in at least one (1) for-credit course from the list of program requirements during the initial admission term (first term) to officially matriculate. **If the student is receiving federal financial aid, they must enroll in 6 or more credits each term to maintain eligibility.** Students not receiving federal aid may pause enrollment in the program after matriculating and enroll again as their schedule allows. Students must consider course prerequisites when enrolling and planning future registration. Please consult the MAS Office and/or your Academic Advisor for assistance in updating your course schedule.

Students will register themselves directly in [SIS Self-Service](#), beginning with the initial matriculation into the program (first term of courses in the first year of their academic program): <https://sis.jhu.edu/sswf/>.

Student Enrollment and Account Management (SEAM)

The Office of Student Enrollment and Account Management (SEAM) has posted FAQs on their website to assist students with general requests related to registration, financial aid, and student accounts. They have developed a [online form](#) for students to submit requests for assistance with registration, financial aid, and student accounts for special circumstances not covered by the FAQs. This form will enable SEAM to assign and answer requests more efficiently, by connecting you to the appropriate staff member who can best assist you. Once you complete the form, you will receive confirmation, and a member of our team will be in touch.

Student Disability Services

The Johns Hopkins University does not discriminate based on race, color, gender, religion, sexual orientation, national or ethnic origin, age, disability, marital status, or veteran status in any student program or activity administered by the University or regarding admissions or employment. The University provides appropriate, necessary, and reasonable accommodation to qualified students, faculty, and staff who are disabled.

In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA), the University provides appropriate, necessary, and reasonable accommodation to qualified students who are disabled. When generally accessible facilities do not adequately accommodate a specific disability, the University makes program and/or facility adjustments as are reasonably necessary to assure individual access.

For individual-specific accommodations, individuals are required to provide from an appropriate professional diagnostician a comprehensive evaluation of their specific disability and recommended accommodations based upon their current level of functioning in an academic or employment setting. This documentation regarding students should be forwarded directly to the school's disability coordinator immediately after the school's offer of admission or as soon as the student is enrolled. The University reserves the right to request additional information from an individual's health care provider, or a health care provider that it designates, to verify appropriate accommodations.

Costs for personal attendants, personally prescribed devices, and services for personal use or study above and beyond what the University provides is the responsibility of the student.

Questions regarding this policy should be referred to the School's Student Disability Services director, who may be reached at 410-955-3034; fax 410-502-9809; email sds-jhu@jhu.edu.

[Student Disability Services](#) at the Bloomberg School of Public Health is located at 2017 East Monument St. Additionally, the University Affirmative Action Office is located on the Homewood Campus: 205 Garland Hall, 410- 516-8075.

Health and Well-being Resources

Johns Hopkins University is committed to helping you thrive personally and professionally and providing an environment that supports your health and well-being. We encourage you to seek support from the following JHU resources, particularly if you are experiencing anxiety, stress, depression, or other concerns related to your health and well-being.

Student Life

[The Office of Student Life](#) at BSPH is available to assist students by providing support in navigating resources pertaining to personal and academic challenges. If you would like to schedule a one-on-one appointment with a staff member in the Office of Student Life, you can contact the Office of Student Life at jhsph-studentlife@jhu.edu or (410) 502-2487.

JHSAP

Students can also contact the [Johns Hopkins Student Assistance Program \(JHSAP\)](#) which provides resources to assist students across the Johns Hopkins community with any pressures and difficulties they may face during their academic careers. Getting help is free, convenient, and confidential.

Counselors are available to speak with you 24 hours a day, 7 days a week at (443) 287-7000. Services include short-term counseling, crisis response, healthy relationship support, school-life coaching and adjustment, and educational workshops.

TimelyCare

Johns Hopkins University now offers [TimelyCare](#), a free virtual mental telehealth program that allows students to access these services 24/7. [TimelyCare](#) offers three kinds of services:

1. **Talk Now** is on-demand access to a mental health professional 24/7. Its goal is to get students connected to a mental health provider within three to seven minutes. Students can discuss any concern, from feeling down to being anxious due to academic, social, or personal demands.
2. **Scheduled Counseling** services are 45-minute appointments with a licensed counselor to talk about anything including depression, anxiety, grief, addiction, and more. Students can pick a counselor based on their schedules. Students are limited to 12 visits per year (6 in the fall and 6 in the spring).
3. **Psychiatry visits** require a referral. For more information on how to access Psychiatry services, please contact UHS, JHSAP, or call [TimelyCare](#) Customer Support at 833-4-TIMELY.

[TimelyCare](#) also provides access to free prescription cards for all students and other prescription services, digital self-care sessions. All [TimelyCare](#) services are available in the United States, but only Talk Now is available outside the of the United States as long as the TimelyCare app is downloaded prior

to travel. Download the TimelyCare app, visit the visit timelycare.com/jhu and use your Hopkins email address to log in, or call at (833) 484-6359 to access this service.

Thriving Campus

JHU has partnered with [Thriving Campus](#) to help make it easier for students to find care in the broader community around campus. [This website](#) allows students to find counselors, therapists, psychologists, or psychiatrists based on location. Students can search for clinicians based on insurance, practice areas, telehealth options, approaches, genders, community expertise, and more.

Help and Support

Students in need of support regarding sexual assault and/ or sexual violence can find resources and information on the University's Sexual Assault Response and Prevention webpage, which can be accessed [here](#).

If you or someone you know is in crisis, call JHSAP at (443) 287-7000 for help immediately. In an emergency, call 911 or go to the nearest emergency room.

Inclusion, Diversity, Anti-Racism, and Equity (IDARE)

IDARE at the Johns Hopkins Bloomberg School of Public Health

BSPH has established an [Office of Inclusion, Diversity, Anti-Racism, and Equity \(IDARE\)](#) to act as a resource and support for prioritizing the cultivation of a diverse, inclusive, and nurturing environment for students, faculty, and staff. The Office of IDARE has developed an [IDARE Action Plan](#), which complements the framework and eight priorities that aim to address racism and build an anti-racist culture within our school community.

Reporting Discrimination and Harassment at BSPH

If you would like to report an incidence of discrimination and/or harassment at BSPH there are two avenues to do so. One is through the [Office of Institutional Equity \(OIE\)](#) and the other is through Safe@Hopkins. Anything reported through these avenues will be investigated.

Through the Office of Institutional Equity, you can report cases of discrimination and harassment, cases of sexual misconduct, and issues related to religious accommodations. Please note that OIE is not a confidential resource, however, it is discreet and only shares information necessary to respond to reports, carry out its assessments and investigations, and comply with applicable law.

Safe@Hopkins includes a 24-hour/seven-day-a-week compliance hotline – which can be accessed both online and by phone at 844-SPEAK2US (844-773-2528). While Safe@Hopkins is for reporting unethical and illegal acts (broadly defined), suspected cases of discrimination and/or harassment can be reported here. Safe@Hopkins also provides the option to report anonymously.

Career Services

Ninety percent of Bloomberg School students are employed (full-time or part-time; or in a fellowship, internship, or residency) after graduation, and the [Career Services Office](#) helps make that happen. From prospective students curious about where a degree in public health might take them to employers looking to hire a recent Bloomberg School grad, the Office's specialists are available to help. Career Services provides resources and guidance, including: Personal career and life-design planning for

students and alumni, Career workshops and events throughout the year, A comprehensive Career, Planner with resume templates, Exclusive access to sponsored career resources, An outstanding variety of networking and professional skills development events, A robust database of public health jobs and internships, Information about public health employers.

The Bloomberg School makes it a priority to ensure our graduates are equipped with the skill sets and resources to reach their career goals. The interactive [Graduate Employment Outcomes Dashboard](#) offers prospective and current students the opportunity to view results of data indicative of our graduates' employment status, sector, and salaries.

The data are collected annually via surveys administered to Bloomberg School graduates approximately one year after graduation.

Email Communication

All email communication is sent to a student's JHU email address only. This includes official communication from the MAS Office. Students must assume full responsibility for regularly monitoring their JHU email and responding in a timely manner. Official communication from the MAS Office will only go to JHU emails, not personal email accounts.

When corresponding with faculty by email, please make sure to add a descriptive subject line and note if the content requires an urgent response. Be sure to notify your faculty and teaching team ASAP if any issues arise during your course that may impact your participation and/or submission of assignments.

Networking Opportunities for MAS Students and Alumni

LinkedIn Program Groups

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

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

[BSPH MAS Patient Safety and Healthcare Quality](#)

[BSPH MAS and Certificate in Population Health Management](#)

[BSPH MAS and Certificate in Spatial Analysis for Public Health](#)

[BSPH MAS in Humanitarian Health](#)

[BSPH MAS and Certificate Programs in Global Health](#)

Program Withdrawals and Continuous enrollment

The Leave of Absence (LOA) process/status is used for full-time students and typically will not apply for students in MAS or Certificate programs. Once you have matriculated in your academic program, if you know that you will be unable to enroll in courses for a significant period (three or more terms), please contact the MAS Office at MAS-Office@jh.edu to discuss whether you should request to be temporarily withdrawn. The Office can have you reinstated in good standing in the program when you are ready to enroll again and can work with your Academic Advisor to assist you in building an updated schedule.

Since the MAS academic programs are offered part-time, they do not require continuous enrollment (registering for courses in terms 1-4 each academic year). However, if a U.S. student is receiving federal financial aid, they are required to register each term for a minimum of 6 credits per term to remain eligible.

Academic Advising

Master's degree programs in MAS are a mixture of didactic coursework, independent reading, and the preparation of a culminating project (Integrative Activity). MAS Certificate programs do not require completion of an Integrative Activity course. While the academic requirements for each degree (and certificate) program are set, academic and professional questions may arise during the program. To help with this, each student is assigned an academic faculty advisor, responsible for serving as a guide and mentor. Students still have personal accountability for a successful graduate program, but academic advisors provide support to make the experience as smooth as possible.

Advisors will be assigned upon initial matriculation, and you may view your advisor(s) in SIS Self-Service by logging in and selecting Registration from the left-hand menu, then Program of Study.

MAS Scholarships

The MAS scholarship will be awarded each term, after students have enrolled and before the term begins. Scholarships are awarded via a manual process in SIS so students will not see the funds in their account immediately upon enrollment. Scholarships are applied per credit, during each term a student is enrolled.

The scholarship only applies for courses required by the academic program and will be awarded throughout its duration. Students can enroll in courses outside of MAS (if not otherwise restricted), understanding that they will pay the regular part-time tuition rate and the course(s) will not apply to their MAS academic program. The MAS scholarship rate is typically confirmed each spring for the upcoming academic year, when the new tuition rates are released.

Graduation

MAS graduates are included in the Bloomberg School of Public Health Convocation and the Johns Hopkins University Commencement held each May. Graduates from August, December and May of that academic year are invited to participate in the ceremonies.

The MAS Office will share details with students when available, and you should also watch for communications from the Registrar's Office. Students must RSVP to attend the ceremonies and all students who walk during Convocation must wear regalia. Students must have completed all required credit and non-credit courses to participate in graduation ceremonies.

Alumni Resources

Graduates of the MAS programs are alumni of the Bloomberg School of Public Health, and Johns Hopkins University, and may take advantage of many alumni benefits. For complete information on life as an alumnus, visit the [Johns Hopkins Alumni Association](#). This site will answer common questions related to your JHED ID, continuing access to online library resources, ordering transcripts, staying connected to student communities, and so much more.

Master of Applied Science in Patient Safety and Healthcare Quality

Overview

The Patient Safety and Healthcare Quality master's program is an interdisciplinary degree offered by the Johns Hopkins University. It is a first-of-its-kind collaboration between the Johns Hopkins Bloomberg School of Public Health, Johns Hopkins School of Medicine, Johns Hopkins School of Nursing and the Armstrong Institute for Patient Safety and Quality. It combines coursework from JHU's top-ranked schools with the Armstrong Institute's pioneering advances in patient safety. This online program is designed to educate students in the transformative mechanisms and evidence-based protocols that reduce preventable patient harm and improve clinical outcomes.

Advising Faculty

One or more of the faculty listed below will serve as Academic Advisor to each of the students in the MAS program. Students can view their Advisor in [SIS Self-Service](#), by logging in and selecting **Registration** from the left-hand menu, then **Program of Study**.

Albert Wu, MD, Professor and Program Director for MAS in Patient Safety and Healthcare Quality awu@jhu.edu	Matthew Austin, PhD, Assistant Professor jmaustin@jhmi.edu
Cheryl Connors, MS, Associate ccicio1@jhmi.edu	Paula Kent, DrPH, MSN, MBA, Associate Faculty pkent2@jhmi.edu
Julia Kim, MD, MPH, Assistant Professor jkim315@jhmi.edu	Michael Rosen, PhD, Assistant Professor mrosen44@jhmi.edu

MAS Program Competencies

By the end of the program, students should be able to:

1. Describe several frameworks and theories for assessing and improving the quality of care
2. Describe current key policy and programmatic areas in quality of care
3. Describe how to assess quality of care for a medical condition
4. Describe key elements of published quality assessment and improvement studies
5. Articulate how to develop a workable quality improvement and evaluation plan
6. Recognize the extent of problems in patient safety in medical care
7. Describe the role of various systems and factors in creating safety and causing errors and adverse events
8. Discuss problems and issues in measuring and reporting safety
9. Demonstrate knowledge of the basics of conducting an incident investigation and disclosing an adverse event
10. Design solutions to improve patient safety
11. Articulate the ethical, legal, and regulatory implications related to patient safety

General Requirements

A minimum of 48.5 credits in formal coursework must be earned, with sufficient passing grades ("C" or higher) and an overall GPA of 2.75 or higher. Required courses are noted in the curriculum section. Students can complete the degree program in two years by following the recommended course plan (two courses each term), but they can take up to four years to finish all degree requirements.

Students must complete several free, non-credit training courses prior to the start of the academic program, or during the first term of enrollment. Details about these training courses will be sent via email and posted on the MAS Student Resources site in [CoursePlus](#).

Standards of Academic Performance

Letter grades must be earned in all courses used to satisfy requirements, unless otherwise specified (such as pass required for Seminars in Public Health). Please note that courses may be counted only once to fulfill requirements. Students must maintain Satisfactory Academic Progress (SAP) toward obtaining their degree or certificate; receive satisfactory grades of "C" or higher in all required courses and continuously maintain a cumulative Grade Point Average (GPA) of at least 2.75 in order to remain a degree candidate in good standing. Any student who receives a "D" or "F" in a required course must repeat the course and achieve a grade of "C" or better.

Any student not meeting these standards will be placed on probationary status. Students must attempt to repeat the courses with insufficient grades when they are next offered (typically in the same term in following academic year for most MAS courses). In cases where conditions are imposed, the Committee will specify the maximum time allowed for satisfaction of the conditions. Failure to satisfy these conditions may result in termination from the program.

If students receive Federal Loans administered through the [Financial Aid Office](#) there are other academic standards that students must abide by in order to comply with Federal Loan disbursement. Students should reach out to that office to verify any impact that incomplete or failed courses may have on their loans.

Time of Completion Requirement

The MAS program is designed to be completed in two years, but students have up to four years to finish all program requirements if that is a better timeline for them. Students receiving federal financial aid should follow the two-year completion plan to maintain the 6-credit minimum per term required for eligibility.

Students who are approaching their deadline and feel they are unable to successfully complete remaining program requirements within four years should reach out to their Academic Advisor and the MAS Office (MAS-Office@jh.edu) to discuss possible scheduling, options, or next steps.

MAS Program in Patient Safety and Healthcare Quality Curriculum and Schedule of Required Courses

Non-credit courses and trainings

In addition to program-specific credit courses (outlined below), all BSPH students are required to complete a set of non-credit courses and trainings. Students will be emailed detailed information regarding these trainings and they MUST be completed by the end of first term at the latest. Please see the list below for all MAS program requirements:

- Introduction to Online Learning (IOL), completed prior to your first term in the program
- Academic and Research Ethics (ARE), must be completed during your first term, or a registration hold may be placed on your account
- Sexual Harassment and Sexual Violence Training
- Required Module on Plagiarism
- Johns Hopkins Opioid Training
- SOURCE: How History Impacts our Work Module
- Acknowledgement and Module for Indigenous Land and Peoples

MAS Program Curriculum and Schedule of Required Courses

In addition to the 2-credit, 3-credit, and 4-credit courses outlined below for Year 1 and 2, the MAS program curriculum requires that students complete 552.612 *Essentials of One Health* (0.5 credit). This course is a requirement for graduation and students will not be awarded the MAS degree until all requirements are completed, including this one. 552.612 *Essentials of One Health* is included in the list below, at the beginning of Year 1 and Year 2, but may be taken in any term offered (currently offered in terms 1, and 4).

Courses are listed below in sequential order, for students who are following a two (2)-year plan. Courses are only offered in the terms indicated. Some of the courses listed below have specific prerequisite courses. Your Academic Advisor can provide guidance if you wish to follow a 3-year or 4-year completion plan. If you need to take courses out of sequence, please verify that you have met any necessary prerequisites before enrolling. If you have any questions about scheduling and prerequisites, please contact your Academic Advisor or the MAS Office.

Year	Term	Course Number	Course Title	Credits
1	1	552.612	Essentials of One Health	.5
1	1	603.711.86	Science of Patient Safety*	4
1	1	600.601.86	Seminars in Public Health	2
1	2	603.701.86	Introduction to Quality of Care for Practitioners*	4
1	2	603.651.86	Case Studies in Quality and Safety*	2
1	3	600.701.86	Introduction to Epidemiology	4
1	3	600.612.86	Professional Development Workshop: Writing for Results	2
1	4	600.709.86	Statistical Concepts in Public Health	3
1	4	603.721.86	Leadership for Change*	3

Year	Term	Course Number	Course Title	Credits
2 (if not taken earlier)	1 (or 4)	552.612	Essentials of One Health	.5
2	1	600.710.86	Statistical Concepts in Public Health II	3
2	1	603.702.86	Quality Improvement Tools*	3
2	2	600.702.86	Intermediate Epidemiology	4
2	2	600.602.86	Seminars in Public Health: Advanced Topics	2

2	3	603.731.86	Measurement and Evaluation in Quality & Safety*	4
2	3	603.751.86	Infection Prevention in Healthcare Settings*	2
2	4	603.880.86	Patient Safety and Healthcare Quality Integrative Activity	4
2	4	603.931.86	Measurement Lab in Quality & Safety**	2

IMPORTANT NOTE:** The courses marked above **MUST BE COMPLETED** prior to enrolling in the 603.880 Integrative Activity course in a student's final term of the program. *603.931 *Measurement Lab in Quality & Safety*** can be taken prior to 603.880, or concurrently with it.

Master of Applied Science in Population Health Management

Overview

The health care services delivery landscape is rapidly transforming. New competencies are required to effectively navigate and succeed under value-based reimbursement models and population-oriented health delivery initiatives. This interdisciplinary degree program provides experienced professionals a comprehensive approach to developing population health management systems and strategies and leading transformation to value-based, population-focused care delivery.

Advising Faculty

One or more of the faculty listed below will serve as Academic Advisor to each of the students in the MAS program. Students can view their Advisor in [SIS Self-Service](#), by logging in and selecting **Registration** from the left-hand menu, then **Program of Study**.

Mark Bittle, DrPH
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mbittle1@jhu.edu

David Baker, DrPH, MBA
Assistant Professor - Adjunct
dbaker26@jhmi.edu

Megan Priolo, DrPH
Associate
mmaguir5@jhu.edu

Debra Thompson, DNP
Associate
dthomp79@jhu.edu

MAS Program Competencies

Core competencies and learning objectives central to the program include:

1. Leadership in Population Health Management:
 - a. Develop the ability to lead and navigate complex population health initiatives, demonstrating effective decision-making, strategic planning, and organizational management skills.
 - b. Cultivate leadership competencies to inspire and mobilize interdisciplinary teams toward achieving population health goals.
2. Communication Strategies in Population Health:
 - a. Enhance communication skills to convey complex population health concepts and strategies to diverse stakeholders, including community members, healthcare professionals, policymakers, and other relevant parties.
3. Data Analysis and Synthesis for Population Health:
 - a. Acquire advanced analytical skills to assess and interpret population health data, employing quantitative and qualitative methodologies to derive actionable insights.
 - b. Integrate data from various sources to inform evidence-based decision-making and design targeted interventions to address population health challenges.
4. Health Equity and Social Determinants of Health:

- a. Explore the social determinants of health and disparities that impact population health outcomes and develop strategies to address health inequities within diverse communities.
 - b. Analyze the intersectionality of numerous factors, such as race, socioeconomic status, and geography, in shaping health disparities and implement policies that promote health equity.
- 5. Collaborative Leadership and Interdisciplinary Teamwork:
 - a. Foster collaboration among diverse stakeholders, including healthcare professionals, community organizations, and policymakers, to create synergies and optimize resources for effective population health management.
 - b. Demonstrate the ability to work in interdisciplinary teams, fostering a collaborative culture that values diverse perspectives and expertise.
- 6. Policy Development and Advocacy:
 - a. Gain expertise in policy development and advocacy strategies to influence public health policies, regulations, and initiatives that positively impact population health at the local, regional, and national levels.
- 7. Implementation Science in Population Health Management:
 - a. Apply principles of implementation science to effectively translate evidence-based population health interventions into practice, ensuring successful implementation and sustainable outcomes.
- 8. Evaluation and Continuous Improvement in Population Health Programs:
 - a. Develop skills in designing and conducting evaluations of population health programs, using performance metrics and feedback to continuously improve program effectiveness and efficiency.

General Requirements

A minimum of 50 credits in formal coursework must be earned, with sufficient passing grades ("C" or higher) and an overall GPA of 2.75 or higher. Required courses are noted in the curriculum section. Students can complete the degree program in two years by following the recommended course plan (two courses each term), but they can take up to four years to finish all degree requirements.

Students must complete several free, non-credit training courses prior to the start of the academic program, or during the first term of enrollment. Details about these training courses will be sent via email and posted on the MAS Student Resources site in [CoursePlus](#).

Standards of Academic Performance

Letter grades must be earned in all courses used to satisfy requirements, unless otherwise specified (such as pass required for Seminars in Public Health). Please note that courses may be counted only once to fulfill requirements. Students must maintain Satisfactory Academic Progress (SAP) toward obtaining their degree or certificate; receive satisfactory grades of "C" or higher in all required courses and continuously maintain a cumulative Grade Point Average (GPA) of at least 2.75 to remain a degree

candidate in good standing. Any student who receives a “D” or “F” in a required course must repeat the course and achieve a grade of “C” or better.

Any student not meeting these standards will be placed on probationary status. Students must attempt to repeat the courses with insufficient grades when they are next offered (typically in the same term in following academic year for most MAS courses). In cases where conditions are imposed, the Committee will specify the maximum time allowed for satisfaction of the conditions. Failure to satisfy these conditions may result in termination from the program.

If students receive Federal Loans administered through the [Financial Aid Office](#) there are other academic standards that students must abide by in order to comply with Federal Loan disbursement. Students should reach out to that office to verify any impact that incomplete or failed courses may have on their loans.

Time of Completion Requirement

The MAS program is designed to be completed in two years, but students have up to four years to finish all program requirements if that is a better timeline for them. Students receiving federal financial aid should follow the two-year completion plan to maintain the minimum credits per term for eligibility.

Students who are approaching their deadline and feel that they are unable to successfully complete all remaining program requirements within four years should reach out to their Academic Advisor and the MAS Office (MAS-Office@jh.edu) to discuss possible scheduling and any options or next steps.

MAS Program in Population Health Management Curriculum and Schedule of Required Courses

Non-credit courses and trainings

In addition to program-specific credit courses (outlined below), all BSPH students are required to complete a set of non-credit courses and trainings. Students will be emailed detailed information regarding these trainings and they MUST be completed by the end of first term at the latest. Please see the list below for all MAS program requirements:

- Introduction to Online Learning (IOL), completed prior to your first term in the program
- Academic and Research Ethics (ARE), must be completed during your first term, or a registration hold may be placed on your account
- Sexual Harassment and Sexual Violence Training
- Required Module on Plagiarism
- Johns Hopkins Opioid Training
- SOURCE: How History Impacts our Work Module
- Acknowledgement and Module for Indigenous Land and Peoples

MAS Program Curriculum and Schedule of Required Courses

Courses are listed below in sequential order, for students who are following a two (2)-year plan. Courses are only offered in the terms indicated. Some of the courses listed below have specific prerequisite courses. Your Academic Advisor can provide guidance if you wish to follow a 3-year or 4-year completion plan. If you need to take courses out of sequence, please verify that you have met any necessary

prerequisites before enrolling. If you have any questions about scheduling and prerequisites, please contact your Academic Advisor or the MAS Office.

Students who successfully complete all year one courses with grades of “C” or better, and overall GPA of 2.75 or higher will also be awarded the Certificate in Population Health Management.

Year	Term	Course Number	Course Title	Credits
1	1	602.631.86	Essentials of Population Health Management	3
1	1	602.651.86	Principles and Applications of Advance Payment Models in Population Health Management	3
1	2	602.671.86	Collective Impact: Developing and Leading Community Partnerships to Improve Population Health	3
1	2	602.681.86	Accountable Care: Assessing Quality and Effectiveness of Population Health Initiatives	3
1	3	600.701.86	Introduction to Epidemiology	4
1	3	602.731.86	Population and Consumer Health Informatics	3
1	4	600.709.86	Statistical Concepts in Public Health	3
1	4	602.691.86	Managing Health Across the Continuum: Contemporary Models of Disease Prevention and Care Management	3

Year	Term	Course Number	Course Title	Credits
2	1	602.701.86	Applied Concepts and Foundations of High Performance for Population Health	3
2	1	602.711.86	Health Behavior: Improving Health through Health Education/Promotion	3
2	2	602.721.86	Organizing for Public Health: A Systems Approach	2
2	2	602.741.86	Behavioral Economics of Risk: Value-Based Payment Methods and Incentives	4
2	3	602.751.86	The Built Environment: Influences and Challenges to Improving Population Health	3
2	3	602.761.86	Valued-based Concepts of Socially-Responsible Leadership	3
2	4	602.880.86	Population Health Management Integrative Activity	4
2	4	604.771.86	Social and Cultural Basis for Community and Primary Health Programs	3

***IMPORTANT NOTE: All year one courses must be completed prior to enrolling in year two courses. All courses must be completed prior to enrolling in 602.880 Integrative Activity.**

Master of Applied Science in Spatial Analysis for Public Health

Overview

The Master of Applied Science in Spatial Analysis for Public Health is a fully online degree program offered by the Johns Hopkins Bloomberg School of Public Health. The curriculum prepares students to effectively collect, map and interpret geographic information to test and refine hypotheses to answer a set of questions within the public health sector.

Location information, now routinely collected with health data and obtainable from advancing technologies, is providing a gateway for researchers and practitioners to incorporate the power of geography into public health. Maps have become a powerful and popular mechanism for public health research and practice, not only for conveying information and synthesizing data from multiple sources, but for leading to new and novel directions for analyzing and interpreting public health data.

Advising Faculty

One or more of the faculty listed below will serve as Academic Advisor to each of the students in the MAS program. Students can view their Advisor in [SIS Self-Service](#), by logging in and selecting **Registration** from the left-hand menu, then **Program of Study**.

Frank Curriero, Program Co-Director – Spatial Analysis for Public Health, MAS Instructor
fcurriero@jhu.edu

Tim Shields, Program Co-Director – Spatial Analysis for Public Health, MAS Instructor
tshields@jhu.edu

MAS Program Competencies

By the end of the program, students should be able to:

1. Interpret and critique epidemiologic studies addressing public health problems
2. Apply measures of morbidity and mortality to the evaluation and comparison of the health of populations
3. Synthesize how geography affects public health
4. Obtain and transfer information from spatial data technologies into a database appropriate for mapping
5. Utilize a geographic information system to map and spatially integrate public health related databases
6. Analyze and interpret maps using tools from the field of spatial statistics to describe and interpret distributions of health outcomes in a population
7. Design and implement a spatial analysis protocol for addressing a public health problem

General Requirements

A minimum of 50.5 credits in formal coursework must be earned, with sufficient passing grades ("C" or higher) and an overall GPA of 2.75 or higher. Required courses are noted in the curriculum section. Students can complete the degree program in two years by following the recommended course plan (two courses each term), but they can take up to four years to finish all degree requirements.

Students must complete several free, non-credit training courses prior to the start of the academic program, or during the first term of enrollment. Details about these training courses will be sent via email and posted on the MAS Student Resources site in [CoursePlus](#).

Standards of Academic Performance

Letter grades must be earned in all courses used to satisfy requirements, unless otherwise specified (such as pass required for Seminars in Public Health). Please note that courses may be counted only once to fulfill requirements. Students must maintain Satisfactory Academic Progress (SAP) toward obtaining their degree or certificate; receive satisfactory grades of "C" or higher in all required courses and continuously maintain a cumulative Grade Point Average (GPA) of at least 2.75 to remain a degree candidate in good standing. Any student who receives a "D" or "F" in a required course must repeat the course and achieve a grade of "C" or better.

Any student not meeting these standards will be placed on probationary status. Students must attempt to repeat the courses with insufficient grades when they are next offered (typically in the same term in following academic year for most MAS courses). In cases where conditions are imposed, the Committee will specify the maximum time allowed for satisfaction of the conditions. Failure to satisfy these conditions may result in termination from the program.

If students receive Federal Loans administered through the [Financial Aid Office](#) there are other academic standards that students must abide by to comply with Federal Loan disbursement. Students should reach out to that office to verify any impact incomplete or failed courses may have on loans.

Time of Completion Requirement

The MAS program is designed to be completed in two years, but students have up to four years to finish all program requirements if that is a better timeline for them. Students receiving federal financial aid should follow the two-year completion plan to maintain the minimum credits per term for eligibility.

Students who are approaching their deadline and feel that they are unable to successfully complete all remaining program requirements within four years should reach out to their Academic Advisor and the MAS Office (MAS-Office@jh.edu) to discuss possible scheduling and any options or next steps.

MAS Program in Spatial Analysis for Public Health Curriculum and Schedule of Required Courses

Non-credit courses and trainings

In addition to program-specific credit courses (outlined below), all BSPH students are required to complete a set of non-credit courses and trainings. Students will be emailed detailed information regarding these trainings and they MUST be completed by the end of first term at the latest. Please see the list below for all MAS program requirements:

- Introduction to Online Learning (IOL), completed prior to your first term in the program

- Academic and Research Ethics (ARE), must be completed during your first term, or a registration hold may be placed on your account
- Sexual Harassment and Sexual Violence Training
- Required Module on Plagiarism
- Johns Hopkins Opioid Training
- SOURCE: How History Impacts our Work Module
- Acknowledgement and Module for Indigenous Land and Peoples

MAS Program Curriculum and Schedule of Required Courses

In addition to the 2-credit, 3-credit, and 4-credit courses outlined below for Year 1 and 2, the MAS program curriculum requires that students complete 552.603 The Role of Qualitative Methods and Science in Describing and Assessing a Population's Health (0.5 credit). This course is a requirement for graduation and students will not be awarded the MAS degree until all requirements are completed, including this one. 552.603 The Role of Qualitative Methods and Science in Describing and Assessing a Population's Health *Essentials of One Health* is included in the list below, at the beginning of Year 1 and Year 2, but may be taken in any term offered (currently offered in summer term, 1, 2 and 3).

Courses are listed below in sequential order, for students who are following a two (2)-year plan. Courses are only offered in the terms indicated. Some of the courses listed below have specific prerequisite courses. Your Academic Advisor can provide guidance if you wish to follow a 3-year or 4-year completion plan. If you need to take courses out of sequence, please verify that you have met any necessary prerequisites before enrolling. If you have any questions about scheduling and prerequisites, please contact your Academic Advisor or the MAS Office.

Year	Term	Course Number	Course Title	Credits
1	1	552.603	The Role of Qualitative Methods and Science in Describing and Assessing a Population's Health	.5
1	1	601.731.86	Spatial Analysis for Public Health*	4
1	1	600.601.86	Seminars in Public Health	2
1	2	601.732.86	Spatial Data Technologies for Mapping*	4
1	2	600.602.86	Seminars in Public Health: Advanced Topics	2
1	3	600.701.86	Introduction to Epidemiology*	4
1	3	600.612.86	Professional Development Workshop: Writing for Results	2
1	4	600.709.86	Statistical Concepts in Public Health 1*	3
1	4	601.840.86	Special Studies and Research in Spatial Analysis for Public Health (lab with R, to accompany 600.709)	1
1	4	601.931.86	Spatial Analysis Lab 1	2

Year	Term	Course Number	Course Title	Credits
2 (if not taken earlier)	1 (or 2,3, summer)	552.603	The Role of Qualitative Methods and Science in Describing and Assessing a Population's Health	.5
2	1	600.710.86	Statistical Concepts in Public Health 2*	3

2	1	601.840.86	Special Studies and Research in Spatial Analysis for Public Health (lab with R, to accompany 600.710)	1
2	1	601.615.86	Online Research Skills for Spatial Analysis for Public Health	2
2	2	600.702.86	Intermediate Epidemiology*	4
2	2	601.932.86	Spatial Analysis Lab 2	2
2	3	601.733.86	Applied Spatial Statistics*	4
2	3	601.805.86	Spatial Analysis Journal Club	2
2	4	601.734.86	Spatial Applications*	4
2	4	601.880.86	Spatial Analysis for Public Health Integrative Activity*	4

***IMPORTANT NOTE: The 4-credit courses (marked with an *) MUST BE COMPLETED in the order shown above and the 601.880 Integrative Activity course must be taken in a student's final term of the program.**

Certificate in Global Health Practice

Overview

The Certificate in Global Health Practice builds on the expertise of the Bloomberg School and the Department of International Health in areas of health systems and community programming. Our School and program provide unmatched opportunities for advanced training, focuses on both local and global issues, and prepares students to address public health problems through multidisciplinary approaches that apply the latest scientific knowledge.

The program will provide you with a foundation for understanding how to meet the health needs of health organizations and communities from the vantage point of non-governmental and governmental agencies serving people in underserved areas and low- and middle-income countries.

Advising Faculty

The faculty listed below will serve as Academic Advisor to each student in the MAS program. Students can view their Advisor in [SIS Self-Service](#), by logging in and selecting **Registration** from the left-hand menu, then **Program of Study**.

William Brieger, DrPH
Professor and Program Director, Certificate
program in Global Health Practice
wbriege1@jhu.edu

Certificate Program Competencies

Competencies for this program are built on the Association of Schools of Public Health (ASPH) Global Health Competency Model. Upon completion of the Certificate in Global Health Practice, students will be able to:

1. Apply capacity building processes to global health programming in low and middle-income countries.
2. Identify and collaborate with a wide range of stakeholders whose active participation is required for successful global health programming at community, sub-national, national and regional levels.
3. Apply ethical reasoning to the policy and programming decisions needed for designing and implementing global health programs in low and middle-income countries.
4. Exhibit a health equity and social justice lens in the design and conduct of global health programs.
5. Apply appropriate management processes in the design, implementation and evaluation of global health programs.
6. Demonstrate social, cultural and political awareness of the context in which global health programming takes place.
7. Conduct strategic analysis of factors that influence the success of global health programming.

General Requirements

A minimum of 20 credits in formal coursework must be earned, with sufficient passing grades ("C" or higher) and an overall GPA of 2.75 or higher. Required courses are noted in the curriculum section.

Students can complete the degree program in two years by following the recommended course plan (two courses each term), but they can take up to four years to finish all degree requirements.

Students must complete several free, non-credit training courses prior to the start of the academic program, or during the first term of enrollment. Details about these training courses will be sent via email and posted on the MAS Student Resources site in [CoursePlus](#).

Standards of Academic Performance

Letter grades must be earned in all courses used to satisfy requirements, unless otherwise specified (such as pass required for Seminars in Public Health). Please note that courses may be counted only once to fulfill requirements. Students must maintain Satisfactory Academic Progress (SAP) toward obtaining their degree or certificate; receive satisfactory grades of “C” or higher in all required courses and continuously maintain a cumulative Grade Point Average (GPA) of at least 2.75 in order to remain a degree candidate in good standing. Any student who receives a “D” or “F” in a required course must repeat the course and achieve a grade of “C” or better.

Any student not meeting these standards will be placed on probationary status. Students must attempt to repeat the courses with insufficient grades when they are next offered (typically in the same term in following academic year for most MAS courses). In cases where conditions are imposed, the Committee will specify the maximum time allowed for satisfaction of the conditions. Failure to satisfy these conditions may result in termination from the program.

If students receive Federal Loans administered through the [Financial Aid Office](#) there are other academic standards that students must abide by in order to comply with Federal Loan disbursement. Students should reach out to that office to verify any impact that incomplete or failed courses may have on their loans.

Time of Completion Requirement

The Certificate program is designed to be completed in one year, but students have up to three years to finish all program requirements if that is a better timeline for them.

Certificate Program in Global Health Practice Curriculum and Schedule of Required Courses

Non-credit courses and trainings

In addition to program-specific credit courses (outlined below), all BSPH students are required to complete a set of non-credit courses and trainings. Students will be emailed detailed information regarding these trainings and they MUST be completed by the end of first term at the latest. Please see the list below for all MAS program requirements:

- Introduction to Online Learning (IOL), completed prior to your first term in the program
- Academic and Research Ethics (ARE), must be completed during your first term, or a registration hold may be placed on your account
- Sexual Harassment and Sexual Violence Training
- Required Module on Plagiarism
- Johns Hopkins Opioid Training
- SOURCE: How History Impacts our Work Module

- Acknowledgement and Module for Indigenous Land and Peoples

Certificate Program Curriculum and Schedule of Required Courses

The Certificate program is not currently admitting new students. Continuing students have through three years from first matriculation to complete the certificate program. Continuing students should be in regular contact with their Academic Advisor/Program Director and the MAS Office (MAS-Office@jh.edu) to verify outstanding program requirements and possible course substitutions.

The course requirements listed below are those included in the original program curriculum, but many will no longer be offered in AY25-26 and require replacement with a similar course. Your Academic Advisor/Program Director and MAS Office will advise which courses require replacement.

Year	Term	Course Number	Course Title	Credits
1	1	606.601.86	Fundamentals of Global Health Practice	4
1	1	Choose 600.601.86 OR 607.704.86	Seminars in Public Health Essential Medicines, Commodities, and Supplies Needed for Community Level Primary Health Care Interventions	2
1	2	604.621.86	Design and Planning of Primary Health Care Projects	4
1	3	Choose 600.701.86 OR 607.735.86	Introduction to Epidemiology Planning, Training and Learning Programs for Community Health Workers	4
1	3	604.604.86	Global Epidemiology Policies and Programs	3
1	4	604.771.86	Social and Cultural Basis for Community and Primary Health Programs	3

Certificate in Population Health Management

Overview

The health care services delivery landscape is rapidly transforming. New competencies are required to effectively navigate and succeed under value-based reimbursement models and population-oriented health delivery initiatives. This interdisciplinary degree program provides experienced professionals a comprehensive approach to developing population health management systems and strategies and leading transformation to value-based, population-focused care delivery.

Advising Faculty

One or more faculty listed below will serve as Academic Advisor to each student in the Certificate program. Students can view their Advisor in [SIS Self-Service](#), by logging in and selecting **Registration** from the left-hand menu, then **Program of Study**.

Mark Bittle, DrPH
Senior Scientist and Program Director
mbittle1@jhu.edu

David Baker, DrPH, MBA
Assistant Professor - Adjunct
dbaker26@jhmi.edu

Megan Priolo, DrPH
Associate
mmaguir5@jhu.edu

Debra Thompson, DNP
Associate
dthomp79@jhu.edu

Certificate Program Competencies

Upon completion of the Certificate program in Population Health Management, the individual will acquire skills necessary to:

1. Identify determinants of population health that impact health outcomes in a community and apply the essentials of public health practice to design low-cost interventions;
2. Lead the formation and management of contemporary health care systems that consist of, and rely upon, diverse stakeholders in the organization and delivery of community-based models of care;
3. Communicate effectively to constituencies both within and outside of the health system;
4. Articulate and apply frameworks for collecting, analyzing, and using data to inform decisions, facilitate care coordination, and improve health outcomes of targeted populations within and outside the health system;
5. Develop effective collaboratives and support state and local public health agency efforts in assessing health needs, quality of services, and strategies for improving health services delivery.

General Requirements

A minimum of 25 credits in formal coursework must be earned, with sufficient passing grades ("C" or higher) and an overall GPA of 2.75 or higher. Required courses are noted in the curriculum section.

Students can complete the degree program in one year by following the recommended course plan (two courses each term), but they can take up to three years to finish all program requirements.

Students must complete several free, non-credit training courses prior to the start of the academic program, or during the first term of enrollment. Details about these training courses will be sent via email and posted on the MAS Student Resources site in [CoursePlus](#).

Standards of Academic Performance

Letter grades must be earned in all courses used to satisfy requirements, unless otherwise specified (such as pass required for Seminars in Public Health). Please note that courses may be counted only once to fulfill requirements. Students must maintain Satisfactory Academic Progress (SAP) toward obtaining their degree or certificate; receive satisfactory grades of “C” or higher in all required courses and continuously maintain a cumulative Grade Point Average (GPA) of at least 2.75 in order to remain a degree candidate in good standing. Any student who receives a “D” or “F” in a required course must repeat the course and achieve a grade of “C” or better.

Any student not meeting these standards will be placed on probationary status. Students must attempt to repeat the courses with insufficient grades when they are next offered (typically in the same term in following academic year for most MAS courses). In cases where conditions are imposed, the Committee will specify the maximum time allowed for satisfaction of the conditions. Failure to satisfy these conditions may result in termination from the program.

If students receive Federal Loans administered through the [Financial Aid Office](#) there are other academic standards that students must abide by in order to comply with Federal Loan disbursement. Students should reach out to that office to verify any impact that incomplete or failed courses may have on their loans.

Time of Completion Requirement

The Certificate program is designed to be completed in one year, but students have up to three years to finish all program requirements if that is a better timeline for them. Students receiving federal financial aid should follow the one-year completion plan to maintain the minimum credits per term for eligibility.

Students who are approaching their deadline and feel that they are unable to successfully complete all remaining program requirements within three years should reach out to their Academic Advisor and the MAS Office (MAS-Office@jh.edu) to discuss possible scheduling and any options or next steps.

Certificate Program in Population Health Management Curriculum and Schedule of Required Courses

Non-credit courses and trainings

In addition to program-specific credit courses (outlined below), all BSPH students are required to complete a set of non-credit courses and trainings. Students will be emailed detailed information regarding these trainings and they MUST be completed by the end of first term at the latest. Please see the list below for all Certificate program requirements:

- Introduction to Online Learning (IOL), completed prior to your first term in the program
- Academic and Research Ethics (ARE), must be completed during your first term, or a registration hold may be placed on your account
- Sexual Harassment and Sexual Violence Training
- Required Module on Plagiarism
- Johns Hopkins Opioid Training
- SOURCE: How History Impacts our Work Module
- Acknowledgement and Module for Indigenous Land and Peoples

Certificate Program Curriculum and Schedule of Required Courses

Courses are listed below in sequential order, for students who are following a one (1)-year plan. Courses are only offered in the terms indicated. Some of the courses listed below have specific prerequisite courses. Your Academic Advisor can provide guidance if you wish to follow a 2-year or 3-year completion plan. If you need to take courses out of sequence, please verify that you have met any necessary prerequisites before enrolling. If you have any questions about scheduling and prerequisites, please contact your Academic Advisor or the MAS Office.

Year	Term	Course Number	Course Title	Credits
1	1	602.631.86	Essentials of Population Health Management	3
1	1	602.651.86	Principles and Applications of Advance Payment Models in Population Health Management	3
1	2	602.671.86	Collective Impact: Developing and Leading Community Partnerships to Improve Population Health	3
1	2	602.681.86	Accountable Care: Assessing Quality and Effectiveness of Population Health Initiatives	3
1	3	600.701.86	Introduction to Epidemiology	4
1	3	602.731.86	Population and Consumer Health Informatics	3
1	4	600.709.86	Statistical Concepts in Public Health	3
1	4	602.691.86	Managing Health Across the Continuum: Contemporary Models of Disease Prevention and Care Management	3

Certificate in Spatial Analysis for Public Health

Overview

Spatial analysis is an emerging field with applications evolving that are vast and paramount, impacting public health at the local and global level. 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.

Advising Faculty

One or more faculty listed below will serve as Academic Advisor to each student in the Certificate program. Students can view their Advisor in [SIS Self-Service](#), by logging in and selecting **Registration** from the left-hand menu, then **Program of Study**.

Frank Curriero, Program Co-Director – Spatial Analysis for Public Health, MAS Instructor
fcurriero@jhu.edu

Tim Shields, Program Co-Director – Spatial Analysis for Public Health, MAS Instructor
tshields@jhu.edu

Certificate Program Competencies

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.

General Requirements

A minimum of 20 credits in formal coursework must be earned, with sufficient passing grades ("C" or higher) and an overall GPA of 2.75 or higher. Required courses are noted in the curriculum section. Students can complete the certificate program in one year by following the recommended course plan (two courses each term), but they can take up to three years to finish all program requirements.

Students must complete several free, non-credit training courses prior to the start of the academic program, or during the first term of enrollment. Details about these training courses will be sent via email and posted on the MAS Student Resources site in [CoursePlus](#).

Standards of Academic Performance

Letter grades must be earned in all courses used to satisfy requirements, unless otherwise specified (such as pass required for Seminars in Public Health). Please note that courses may be counted only once to fulfill requirements. Students must maintain Satisfactory Academic Progress (SAP) toward obtaining their degree or certificate; receive satisfactory grades of “C” or higher in all required courses and continuously maintain a cumulative Grade Point Average (GPA) of at least 2.75 to remain a degree candidate in good standing. Any student who receives a “D” or “F” in a required course must repeat the course and achieve a grade of “C” or better.

Any student not meeting these standards will be placed on probationary status. Students must attempt to repeat the courses with insufficient grades when they are next offered (typically in the same term in following academic year for most MAS courses). In cases where conditions are imposed, the Committee will specify the maximum time allowed for satisfaction of the conditions. Failure to satisfy these conditions may result in termination from the program.

If students receive Federal Loans administered through the [Financial Aid Office](#) there are other academic standards that students must abide by in order to comply with Federal Loan disbursement. Students should reach out to that office to verify any impact that incomplete or failed courses may have on their loans.

Time of Completion Requirement

The Certificate program is designed to be completed in one year, but students have up to three years to finish all program requirements if that is a better timeline for them. Students receiving federal financial aid should follow the one-year completion plan to maintain the minimum credits per term for eligibility.

Students who are approaching their deadline and feel that they are unable to successfully complete all remaining program requirements within three years should reach out to their Academic Advisor and the MAS Office (MAS-Office@jh.edu) to discuss possible scheduling and any options or next steps.

Certificate Program in Spatial Analysis for Public Health Curriculum and Schedule of Required Courses

Non-credit courses and trainings

In addition to program-specific credit courses (outlined below), all BSPH students are required to complete a set of non-credit courses and trainings. Students will be emailed detailed information regarding these trainings and they MUST be completed by the end of first term at the latest. Please see the list below for all MAS program requirements:

- Introduction to Online Learning (IOL), completed prior to your first term in the program
- Academic and Research Ethics (ARE), must be completed during your first term, or a registration hold may be placed on your account
- Sexual Harassment and Sexual Violence Training
- Required Module on Plagiarism
- Johns Hopkins Opioid Training
- SOURCE: How History Impacts our Work Module
- Acknowledgement and Module for Indigenous Land and Peoples

Certificate Program Curriculum and Schedule of Required Courses

Courses are listed below in sequential order, for students who are following a one (1)-year plan. Courses are only offered in the terms indicated. Some of the courses listed below have specific prerequisite courses. Your Academic Advisor can provide guidance if you wish to follow a 2-year or 3-year completion plan. If you need to take courses out of sequence, please verify that you have met any necessary prerequisites before enrolling. If you have any questions about scheduling and prerequisites, please contact your Academic Advisor or the MAS Office.

Year	Term	Course Number	Course Title	Credits
1	1	601.731.86	Spatial Analysis for Public Health*	4
1	2	601.732.86	Spatial Data Technologies for Mapping*	4
2	3	601.733.86	Applied Spatial Statistics*	4
2	3	601.805.86	Spatial Analysis Journal Club	2
2	4	601.734.86	Spatial Applications*	4

***IMPORTANT NOTE: The 4-credit courses (marked with an *) MUST BE COMPLETED in the order shown above.**

CEPH Accreditation

About CEPH

CEPH is the Council on Education for Public Health. This agency is recognized by the U.S. Department of Education in accrediting schools of public health and public health programs. The Bloomberg School of Public Health receives its accreditation from CEPH, ensuring that the programs and educational experiences of its students are of the highest quality. Accreditation is awarded and maintained based on the School's compliance to CEPH's foundational competencies and additional accreditation criteria. For additional information on CEPH, most recent accreditation criteria, and the accreditation process, please visit the [CEPH website](#).

Foundational Public Health Knowledge

As schools of public health, CEPH ensures that all degree graduates of a public health program have foundational knowledge in two major branches of public health:

Profession & Science in Public Health

1. Explain public health history, philosophy, and values.
2. Identify the core functions of public health and the 10 Essential Services.
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health.
4. List major causes and trends of morbidity and mortality in the U.S. or other community relevant to the school or program.
5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.
6. Explain the critical importance of evidence in advancing public health knowledge.

Factors Related to Human Health

7. Explain effects of environmental factors on a population's health.
8. Explain biological and genetic factors that affect a population's health.
9. Explain behavioral and psychological factors that affect a population's health.
10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities.
11. Explain how globalization affects global burdens of disease.
12. Explain an ecological perspective on the connections among human health, animal health, and ecosystem health (e.g., One Health).

The competencies shown above apply to the curriculum of all MAS programs and are covered by the academic content therein.