

# MASTER OF APPLIED SCIENCE IN PATIENT SAFETY AND HEALTHCARE QUALITY, MAS

## Program Overview

The Master of Applied Science (MAS) is a fully online, part-time degree designed for working professionals. Programs focus on emergent industry sectors in public health and healthcare that have a need for highly skilled professionals. By building on the strengths of the School, they provide unmatched opportunities for advanced training and focus on both local and global health issues. Students are prepared to create innovative solutions through multidisciplinary approaches that apply the latest scientific knowledge. All MAS programs will culminate in a final Integrative Activity. The goal of this activity is for students to synthesize knowledge and skills obtained through coursework in a final project that demonstrates mastery of program competencies, as applied to real-world public health and healthcare questions. Students can complete their degree program in as little as two years but are allowed up to four years.

The Patient Safety and Healthcare Quality master's program (<https://publichealth.jhu.edu/academics/mas-in-patient-safety-and-healthcare-quality/>) is an interdisciplinary degree offered by Johns Hopkins University. It is a first-of-its-kind collaboration between the 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. The program is designed to educate students in the transformative mechanisms and evidence-based protocols that reduce preventable patient harm and improve clinical outcomes.

## LinkedIn Group

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

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

B (<https://www.linkedin.com/groups/8675147/>)SPH MAS in Patient Safety and Healthcare Quality (<https://www.linkedin.com/groups/8675147/>)

## 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://lms.marphct.pitt.edu/>).

The Welch Medical Library at Johns Hopkins has many resources related to research, writing and documentation on their 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.

## MAS in Patient Safety Contact Information

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### For Program-wide Issues

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Program Office

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## Program Requirements

Course location and modality is found on the BSPH website (<https://publichealth.jhu.edu/courses/>).

The Master of Applied Science in Patient Safety and Healthcare Quality is an interdisciplinary degree offered fully online. The topics and concepts educate students in the transformative mechanisms and evidence-based protocols that reduce preventable patient harm and improve clinical outcomes.

Students will complete 48.5 credits to graduate. The program is designed to be completed in two academic years (Sept-May). In addition to the coursework, students must complete an Integrative Activity, where newly acquired knowledge and skills are used to create an applicable activity (e.g., identifying a patient safety or healthcare quality problem and designing a solution, plan for implementation and evaluation method) – with a final paper that describes the methodology used and the

final assessment. Students can complete their degree program in as little as two years but are allowed up to four years.

### Satisfactory Academic Progress (SAP)

The Bloomberg School of Public Health requires students to maintain satisfactory academic progress for the duration of the degree program. For the MAS program, satisfactory academic progress is defined as follows:

Maintaining a minimum cumulative grade point average of 2.75 and grades of C or better in all required courses. Grades of P are sufficient in courses that are graded as Pass/Fail. Students falling below this minimum should consult with the MAS Program Office and their Academic Adviser in order to develop a course plan to allow them to raise their GPA above 2.75 as soon as possible in order to return to good academic standing.

Failure to maintain satisfactory academic progress as defined by any of the criteria above may be grounds for dismissal from the program, and financial aid status will be affected. Full details of the School's Satisfactory Academic Policy can be found here (<https://e-catalogue.jhu.edu/public-health/policies/academic/grading-system/>).

### Program Plan of Study

Students should follow the plan outlined below if they wish to complete the MAS program in two years. This plan will also allow students to maintain minimum credits needed for financial aid eligibility each term and to follow any prerequisite sequencing. Courses can be taken at a slower pace if needed, so long as course prerequisites are met.

Course	Title	Credits
<b>First Year</b>		
<b>First Term</b>		
PH.550.860	Academic & Research Ethics at JHSPH	
PH.600.601	Seminars in Public Health	2
PH.603.711	Science of Patient Safety	4
PH.552.612	Essentials of One Health <small>May be taken during any term offered</small>	0.5
<b>Credits</b>		<b>6.5</b>
<b>Second Term</b>		
PH.603.651	Case Studies in Quality and Patient Safety	2
PH.603.701	Introduction to Quality of Care for Practitioners	4
<b>Credits</b>		<b>6</b>
<b>Third Term</b>		
PH.600.612	Professional Development: Writing for Results	2
PH.600.701	Introduction to Epidemiology	4
<b>Credits</b>		<b>6</b>
<b>Fourth Term</b>		
PH.600.709	Statistical Concepts in Public Health 1	3
PH.603.721	Leadership for Change and Patient Safety and Quality Improvement	3
<b>Credits</b>		<b>6</b>
<b>Second Year</b>		
<b>First Term</b>		
PH.600.710	Statistical Concepts in Public Health 2	3

PH.603.702	Quality Improvement Tools	3
<b>Credits</b>		<b>6</b>
<b>Second Term</b>		
PH.600.702	Intermediate Epidemiology	4
PH.600.602	Seminars in Public Health: Advanced Topics	2
<b>Credits</b>		<b>6</b>
<b>Third Term</b>		
PH.603.751	Infection Prevention in Healthcare Settings	2
PH.603.731	Measurement and Evaluation in Quality and Safety	4
<b>Credits</b>		<b>6</b>
<b>Fourth Term</b>		
PH.603.880	Patient Safety and Healthcare Quality integrative Activity	4
PH.603.931	Measurement Lab in Quality & Safety	2
<b>Credits</b>		<b>6</b>
<b>Total Credits</b>		<b>48.5</b>

## Integrative Activity

### Master of applied science (mas) Integrative Activity: Human Subjects Research and Other Activities

This culminating experience will provide Master of Applied Science students with the opportunity to synthesize lessons learned via the application of concepts and techniques. Please note that individual degree programs may have specific guidelines related to their particular Integrative Activity course including, but not limited to, the format, presentation, and composition of final course deliverables.

As you begin planning the research for your Integrative Activity within the MAS program, please review the information below and proceed accordingly. Regardless of whether IRB review is required, all MAS students should apply ethical principles in their interactions with humans and/or their data. Please follow the BSPH Ethical Code for Student Activities that Involve Human Interactions.

- As long as the project is limited to the context of the course or courses if components of the Integrative Activity are spread among more than one course, there is no need for IRB approval, even if the project involves human subjects research. These types of student projects are considered learning exercises when there is no plan to disseminate beyond the class, School, or affiliated agency.
- If you do wish to publish your project while you are a student, you will need to test to see if you are conducting Human Subjects Research (HSR) which would necessitate IRB approval. You can test your project for HSR by using the IRB worksheet or consulting the IRB guidance flowchart. You will need to go to IRB for official/final determination **before** beginning your research in order to be approved for publication. All student-initiated research projects which you intend to publish must have a preliminary review by the IRB Office to determine whether they are human subjects research requiring IRB oversight, unless: (1) the student is working with a Principal Investigator (PI) from another institution, or (2) the PI is adding you as a student investigator to an existing, IRB-approved study. If you are using human subjects data, you must obtain a determination from the BSPH IRB. If you are collecting primary new data, complete the IRB Office Determination Request Form for Primary Data Collection or if you are using existing data, complete the IRB Office Determination Request Form for Secondary Data Analysis in collaboration with

your adviser and submit it to the BSPH IRB Office e-mail address [bsph.irboffice@jhu.edu](mailto:bsph.irboffice@jhu.edu). Be sure to include your adviser in your e-mail submission.

3. If you do not intend to publish the project while you are a student, IRB approval will not be required. However, if you would be interested in publishing it after graduating from JHU, you should note that *the project must meet the ethical standards of your institution and that many institutions will not allow you to present/publish human subjects research without having prior IRB approval*. For this reason, we strongly recommend that you consult your organization now if you think you may wish to publish in the future.

## Program Policies

For a full list of program policies, please visit the MAS in Patient Safety and Healthcare Quality Curriculum page (<https://publichealth.jhu.edu/academics/mas-in-patient-safety-and-healthcare-quality/curriculum/>) where students can find our handbook.

## PROGRAM COMPETENCIES

The Master of Applied Science in Patient Safety and Healthcare Quality is an interdisciplinary degree offered fully online. It spans several divisions across Johns Hopkins University. Faculty at the Bloomberg School of Public Health, the Johns Hopkins School of Medicine, and the Johns Hopkins School of Nursing contribute to the program via course development, teaching, and advising students. The topics and concepts educate students in the transformative mechanisms and evidence-based protocols that reduce preventable patient harm and improve clinical outcomes.

According to the requirements of the Council on Education for Public Health (CEPH), all BSPH degree students must be grounded in foundational public health knowledge. Please view the list of specific CEPH requirements by degree type (<https://e-catalogue.jhu.edu/public-health/ceph-requirements/>).

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