One-Year Master of Science Program (SM1) in HPM

The One-Year Master of Science Program (SM1) is an academic degree program designed for individuals with doctoral degrees in medicine, dentistry, or other health-related disciplines who are pursuing research careers and want to further develop their analytic and quantitative skills. The program is appropriate for students who plan to pursue health policy research and for students interested in domestic or international research questions.

Program Competencies

Through coursework and supervised independent study, students in the SM1 program in Health Policy and Management will be able to:

- 1. Demonstrate the ability to critically evaluate and apply appropriate biostatistical techniques for data arising from evaluation of public health problems (e.g., basic probability theory and common distributions, effect measure estimation, continuous and categorical data analysis, parametric and non-parametric hypothesis tests, confidence intervals and p-values, correlation and basic regression techniques and power/sample size calculations)
- 2. Apply economic concepts to analyze and critique health care and public health policies
- **3.** Critically evaluate and draw policy implications from health decision science studies, including cost-effectiveness analyses
- **4.** Explain the imperatives to improve health quality and apply methods of quality improvement to address a quality problem.
- **5.** Design and produce a health policy analysis or research study that results in a manuscript of publishable quality

Program Requirements

Students must take a minimum of 42.5 credits for graduation (at least 30 of which must be taken for ordinal credit) and fulfill the course requirements below. Please note that students may take no more than a total of 12.5 pass/fail credits while working towards their degree.

A. School-wide Requirements for Academic Master's Degree Programs

1. Foundational Public Health Knowledge

All Harvard Chan students are required to take the following course to obtain grounding in foundational public health knowledge:

ID 100 [Pre-matriculation and Fall1]	Foundations for Public Health	1.0 credits
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Students with a prior Bachelor's in public health or Master of Public Health from a <u>CEPH-accredited school or program</u> are eligible to waive ID 100. To request to waive ID 100: *Foundations for Public Health*, please contact <u>ID100@hsph.harvard.edu</u>.

2. Biostatistics

Students must complete 5 credits of biostatistics. Courses that fulfill this school-wide requirement are:

BST 201 [Fall]	Introduction to Statistical Methods	5.0 credits
	<u>Or</u>	
BST 202/203[Summer]	Principles of Biostatistics I and II	5.0 credits

3. Epidemiology

Students must complete at least 2.5 credits of Epidemiology. Courses that fulfill this school-wide requirement are:

EPI 500 [Summer 1]	Fundamentals of Epidemiology	2.5 credits
	<u>Or</u>	
EPI 201 [Fall 1] and	Introduction to Epidemiology: Methods I	5.0 credits
EPI 202 [Fall 2]	Epidemiologic Methods 2: Elements of Epidemiologic	
	Research	
	<u>Or</u>	
EPI 208 [Summer]	Introduction to Clinical Epidemiology	5.0 credits

Students may request to waive these school-wide biostatistics and epidemiology requirements if they can demonstrate that they have completed prior equivalent graduate coursework. See more information here: https://www.hsph.harvard.edu/epidemiology/waiving-school-wide-biostatistics-and-epidemiology-core-course-requirement/.

Any student who waives these requirements is encouraged to take more advanced quantitative coursework, with the selection of courses to be determined in consultation with their academic adviser.

B. Departmental Requirements

Students also must take an additional 10 credits in the Department of Health Policy and Management and complete an additional 5 credits of supervised independent study under the direction of an HPM faculty member.

The 10 HPM course credits must include courses in each of the following subject areas: *Economic Analysis; Quality of Care; and Health Decision Sciences.* Courses that fulfill these requirements are listed below.

1. <u>Economic Analysis</u>

HPM 260[Summer]	Health Economics with Applications to Global Health	2.5 credits
	Policy	
HPM 206 [Fall 2]	Economic Analysis	2.5 credits
HPM 545 [Spring2]	Economics of Health Care	2.5 credits

2. Quality of Care

HPM 253 [Summer2]	Improvement in Quality of Health Care	2.5 credits
HPM 268 [Fall2]	Methods and Tools for Quality Improvement	2.5 credits
HPM 516 [Spring 2]	Health Care Quality and Equity in the U.S.	2.5 credits
HPM 568 [Spring 2]	Designing and Managing Person-Centered, Safe Care	2.5 credits
	Organizations	

3. Health Decision Sciences

RDS 280 [Fall 2]	Decision Analysis for Health and Medical Practices	2.5 credits
RDS 202 [Spring]	Decision Science for Public Health	2.5 credits
RDS 282 [Spring 2]	Economic Evaluation of Health Policy and Program	2.5 credits
	Management	
RDS 284 [Fall]	Decision Theory	5.0 credits
RDS 285 [Spring 1]	Decision Analysis Methods in Public Health and Medicine	2.5 credits
RDS 286 [Summer 1]	Decision Analysis in Clinical Research	2.5 credits
RDS 288 [Summer 2]	Methods for Decision Making in Medicine	2.5 credits

Students may request to waive required courses in areas where they can demonstrate that they have attained the relevant competencies through prior graduate level coursework.

4. Final Research Project or Paper

Students are required to complete a research project or paper, under the supervision of an HPM faculty member. This requirement will be completed through an independent study of at least 5.0 credits with the faculty member.

HPM 300 [Fall/Spring]	Independent Study/Tutorial	5.0 credits
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Questions and More Information

Any questions about the One-Year Master of Science Program may be directed to:

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