

Global Public Health Academic Business Plan

Overview [Provides a brief description of the program or facility being proposed. Emphasis should be on the capability that will be gained. After reading this section, the reader should have no question about just what is being proposed.]

The Global Public Health (GPH) major will provide transdisciplinary training for students broadly interested in health and particularly interested in disease prevention, strengthening the future public health and healthcare provider workforce. This program capitalizes on existing research and teaching strengths across multiple departments in Harpur College and brings these courses together into one program. Cohesion will be provided by the creation of an introductory sequence and a capstone sequence to bookend students' experience of the diverse disciplinary contributions to understanding and improving global public health.

The program will comprise coursework across the core areas of public health and the core competencies of global health, as laid out by the Committee for Excellence in Public Health and the Consortium of Universities for Global Health, respectively. These core areas are currently considered in accreditation guidelines for Master of Public Health (MPH) programs and undergraduate programs (by the Committee for Excellence in Public Health). The program will be well-positioned to seek accreditation after operating for ~3 years.

Students will leave the major prepared for employment in public health, health advocacy, hospital administration, international development, the non-profit/service sector, as well as further study in global public health, medicine, and allied health professions. We designed the program with two core groups of students in mind: 1) those who are “pre-health”, with a designated BS track that encompasses many of the courses required for application to medical school (and most other doctoral level training for health professions); 2) those who plan to go into public health in the US or internationally, with more flexible BA and BS tracks. All three tracks share a core curriculum and opportunities to tailor coursework to students' interests.

We propose the creation of six new courses. With these courses, all GPH students will receive training in the core content areas of global public health. (The “core” public health content areas are: epidemiology, biostatistics, environmental health, social and behavioral sciences, and health systems; global health, although not a “core” area of public health training, as it intersects with all other core content areas, we treat as an additional core area, in keeping with the *de facto* practice of many public health schools and programs.) *Global Public Health I and II (GPH 301-302) and Environmental Health (GPH 303)*: this course sequence will cover the core areas of public health not already explicitly covered in the Harpur curriculum. *Global Public Health Capstone I and II (GPH 401-402)*: a capstone sequence (2 credits per semester) to provide students training in the mixed qualitative and quantitative, transdisciplinary methodological approach to research that is a hallmark of global public health. *Global Public Health Seminar Series (GPH 390)*: a weekly seminar to provide students research talks, DEI workshops, and professionalization opportunities.

- GPH 301 will serve as a general introduction and will cover the public health core content area of Social and Behavioral Sciences and Health. The existing course, Introduction to Community Public Health (AFST 380T) will serve as the foundation for GPH 301
- GPH 302 will cover the core content area of Health Systems and Policy. (The only area not already explicitly covered with a dedicated course within Harpur's curriculum.)

- GPH 303 will cover the core content area of Environmental Health; this content was previously available to Harpur students in a popular Geography course (GEOG-336: Environmental Health Disparities), and replacing it will serve the needs of both the GPH and Environmental Studies programs.
- GPH 390 will prepare students for a variety of health careers through weekly presentations of cutting-edge research, workshops (e.g., stereotypes and anti-bias training), professionalization events (e.g., CV preparation), and panel discussions (e.g., graduate student opportunities).
- Global Public Health Capstone (GPH 401-402) will provide students a year-long research experience to be completed in a student's final year (2 credits per semester).

We also propose to update the content of ANTH 249 Introduction to Epidemiology, to include the core area of Biostatistics (Introduction to Epidemiology and Biostatistics).

Context [Examine the current situation of the academic unit and suggests how the proposed development can utilize existing resources and structures to good advantage. In general, it will be easier and more cost effective to build on existing strengths rather than undertake development in an entirely new direction.]

Many academic units within Harpur offer at least some coursework with global health or public health content. Students with public health interests have, until now, generally specialized in one or two of these departments via existing major/minor programs, or have used the individualized major program (IMP) to create a global and/or public health curriculum for themselves. The proposed program will capitalize on these existing courses and our students' transdisciplinary interests in global public health to define a set of pathways for students with these interests, and to increase the visibility of public health in the university's curriculum for undergraduate students. The vast majority of courses in the proposed program already exist, but none of the college's existing majors (or even conceivable double majors) can accommodate the diversity of disciplinary training that we propose.

Benefits [Detail what the sponsoring unit and the University will gain from the establishment of the program or facility. It is essential that a clear connection be drawn between the new development and the existing mission and goals of the unit and that the associated improvements in program be examined. It should also be made clear how the program or facility relates to the mission and the strategic plan of the University. Since this is an academic plan, it will be necessary to address separately the aspects of education, research, and service.]

The Global Public Health program recognizes sustained growth in Binghamton undergraduate pre-health interest over the last decade, and seeks to capitalize on that growth by offering a program that spans disciplines and departments, and points to multiple career paths. Demand for pre-health classes, tracks, and majors continues to expand quickly. This program recognizes the crucial intersection of humanist, social sciences, and life sciences topics and skills, and offers both curriculum and career paths that join these approaches. The majors will attract students from all three divisions. Broadly, the BS path will attract students interested in the physical and life sciences, medical school, or other allied health programs. The BA will attract students interested in the humanities and social sciences. Both paths will be attractive to students interested in MPH programs. For both the BA and BS, the transdisciplinary nature of the program is its strength, creating a unified curriculum that speaks to a variety of interests and paths in global public health.

The program prepares students for multiple fulfilling career options by helping them become "global citizens, successful professionals and lifelong learners," consistent with the Road Map priorities for

internationalization and developing learning communities. A Global Public Health BA or BS will prepare students for careers and graduate school, encourage hands on learning through internships, study abroad experiences, research opportunities, and service learning.

Cost [Outline the capital cost of establishing the program or facility. Provide as much detail as possible concerning the source of the capital or one-time funds that will be required. When appropriate, there should also be an analysis of intangible costs such as lost opportunities and political liabilities created. Also included should be an outline of human resource costs. What type and level of personnel are envisioned as being involved with the program?]

We anticipate few or no costs in terms of lost opportunities or political liabilities in establishing this program. We will hire two tenure-line faculty to support the core curriculum, build the research profile of the program (which indirectly benefits student learning in myriad ways), and share governance of the program in the coming years. In year 1, we will hire an advanced Assistant or tenured Associate Professor with expertise in Environmental Health. In year 2, we will hire a tenure line faculty member with expertise in Health Policy. Both positions will be core Global Public Health faculty, together with Associate Professors Katherine Wander and Titilayo Okoror. These hires will allow us to offer annually all core courses (GPH 302, 303, 401 and 402 and ANTH 249); further, they will round out the core Global Public Health faculty's breadth of expertise and support the anticipated rapid growth of the program. All other coursework required for the program will come from departmental offerings across Harpur College.

Other costs associated with the program include: 1) administrative support—10% FTE of a support staff member's time will be dedicated to the program (this staff member will be shared with other interdisciplinary units in Harpur College); 2) an hourly 20h/week position for a graduate assistant in years 1-3 of the program to support the Director in publicizing the program, constituting advisory boards, organizing the seminar series, and other start-up activities; 3) seminar related costs (travel for outside speakers, food, printing, etc); 4) organization memberships and eventual accreditation; and 5) a course release for the program's Director.

Operating Plan [Specify not only what will be done but who will do it and when it may be expected to be done. The period of the plan will depend upon the program or facility being developed but it would generally span at least the first five years of existence.]

2021-2022: Review current curriculum and revise as needed to maximize representation of Harpur strengths in global and public health; submit proposal for approval (Binghamton University, SUNY and the State Education Department; Titilayo Okoror, Katherine Wander, Rolf Quam, Andy Merriwether)

2022-2023: Publicize the program to current and incoming Binghamton students via social media and the university website, pre-health advising and courses, classroom visits, and other avenues; implement the new curriculum and major beginning in Fall 2023 (Katherine Wander and Titilayo Okoror)

2023-2026: Offer the first capstone sequence in Fall 2023-Spring 2024; assess need(s) for curricular changes and capacity to grow the program and revise or update as needed (all core program faculty)

Financial Plan [Key into Operating Plan. Include an analysis of the ongoing cost of operation and identify the sources of the funds that will be required. Obviously, the plan must show a surplus or break-even bottom line but it may include a subsidy from the sponsoring unit.]

As with other interdepartmental programs in Harpur College, we will have a program director with administrative support in a Harpur College department. Overall, the annual costs will be:

	Academic Year 1	Academic Year 2	Academic Year 3	Academic Year 4	Academic Year 5
Personnel (including faculty and all others)	94,600	171,200	174,332	174,332	174,353
Other: Course release, membership/ accreditation fees, printing	16,550	16,550	15,550	19,050	19,850
Total	111,150	187,750	189,882	188,522	194,203

Design [Provide as much detail as possible about the program or facility.]

Requirements

Global Public Health BA Track	Credits
8 credits from the following Core Course list: <ul style="list-style-type: none"> • ANTH 206 Community Public Health I (FRI stream) • ANTH 306 Community Public Health II (FRI stream) • ANTH 249 Introduction to Epidemiology and Biostatistics • GPH 303 Environmental Health • AFST 450 Global Health 	8
GPH 301 Global Public Health I: Social & Behavioral Sciences and Health	4
GPH 302 Global Public Health II: Health Systems & Policy	4
20 credits of General Public Health Courses, such as: At least 8 credits must be at the 300-level or higher <ul style="list-style-type: none"> • ENVI 101 Humans and Ecological Environment • ANTH 240 Medical Anthropology for Pre-Health • ANTH 243 Medical Anthropology: Human Biology and Health • ANTH 244 Plagues, Culture and History • AFST 345 Race, Philosophy, and Law • AFST 480F Diversity and Health • ANTH 429 Anthropology and Global Health 	20
16 credits of Electives, such as: 8 credits must be 300-level or higher <ul style="list-style-type: none"> • GEOG 103 Multi-cultural Geographies of the US • AFST 212 African Intellectual Traditions • AFST 235 Muslim Peoples of the World • ANTH 277 Food Consumption and the Body • ANTH 350 Climate Change and Society • AFST 372 Arabic Civilization and Culture • AAAS 463 Medicine and Body in East Asia 	16
GPH 401 Global Public Health Research Capstone I	2
GPH 402 Global Public Health Research Capstone II	2
TOTAL	56

Proposed BS Global Public Health Track	Credits
8 Credits of Courses from the Program Core Course List <ul style="list-style-type: none"> • ANTH 206 Community Public Health I • ANTH 306 Community Public Health II • ANTH 249 Intro to Epidemiology and Biostatistics 	8

<ul style="list-style-type: none"> • GPH 303 Environmental Health • AFST 450 Global Health 	
GPH 301 Global Public Health I	4
GPH 302 Global Public Health II	4
20 Credits of BS Global Public Health Course list, such as: <ul style="list-style-type: none"> • ENVI 101 Humans and Ecological Environment • ENVI 201 Humans and Physical Environment • HIST 230 History of Modern Medicine • ANTH 243 Medical Anth: Human Biology and Health • ANTH 244 Plagues, Culture, and History • AFST 345 Race, Philosophy and Law • AFST 360 Refugee and Immigrant Health • PHIL 480G Global Health Impact 	20
28 Credits (<i>12 from the 300-level or higher</i>) from BS Public Health Electives list, such as: <ul style="list-style-type: none"> • BIOL 113 Intro to Cellular and Molecular Biology • BIOL 114 Intro to Organismal and Population Biology • ANTH 248 Evolutionary Medicine • ENVI 260 Intro to GIS and Spatial Analysis • BIOL 304 Pre-health Biochemistry • BIOL 314 General Microbiology • BIOL 319 Pre-health Microbiology • ANTH 333 Human Genetics • SOC 353 The Sociology of Reproduction 	28
GPH 401 GPH Research Capstone	2
GPH 402 GPH Research Capstone	2
TOTAL	68

Proposed BS Future Healthcare Providers Track	Credits
8 credits from the following list: <ul style="list-style-type: none"> • ANTH 206 Community Public Health I • ANTH 306 Community Public Health II • ANTH 249 Introduction to Epidemiology and Biostatistics • GPH 303 Environmental Health • AFST 450 Global Health 	8
GPH 301 Global Public Health I	4
GPH 302 Global Public Health II	4
16 Credits (<i>12 from the 300-level or higher</i>) of Global Public Health Courses such as: <ul style="list-style-type: none"> • ANTH 243 Medical Anthropology: Human Biology and Health 	16

<ul style="list-style-type: none"> • ANTH 244 Plagues, Culture, History • ANTH 350 Climate Change and Society • ANTH 429 Anthropology and Global Health • AFST 317 African Women and Feminism • AFST 360 Refugee and Immigrant Health 	
<p>36 Credits of Pre-Health Courses such as:</p> <ul style="list-style-type: none"> • BIOL 113 Intro to Cell & Molecular Biology • BIOL 114 Intro to Organisms & Populations Biology • BIOL 304 Pre-Health Biochemistry • CHEM 104 General Chemistry I • CHEM 105 General Chemistry II • CHEM 231 Organic Chemistry I • CHEM 332 Organic Chemistry II • PHYS 121 General Physics I • PHYS 122 General Physics II • MATH 147 Elementary Statistics • MATH 224 Differential Calculus • MATH 225 Integral Calculus 	36
GPH 401 GPH Research Capstone	2
GPH 402 GPH Research Capstone	2
TOTAL	72

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Attachment 1

Diversity Statement

Relevant diversity: The fields of global public health and medicine would benefit from more diversity. Although women predominate most health professions, they are under-represented in the best compensated fields (e.g., dentist, physician). Blacks, Latinx/Hispanic, Native American, and other racial and ethnic minorities are under-represented relative to Whites among the majority of health professions; representation is particularly disparate in those professions that are the best compensated. (Data from US DHHS 2010-2015: <https://bhwh.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/diversity-us-health-occupations.pdf>; note that public health professionals tend to be combined with healthcare providers in the gathering and reporting of data on the race/ethnicity and sex/gender in health sectors.) This program will contribute to building a more diverse public health workforce by providing a friendly pathway for under-represented minorities into public health.

Plans to recruit under-represented students: Understanding how health varies across national, cultural, and other groups is integral to the fields of public health and global health, as is a commitment to health equity and environmental justice. The roles of sex and gender, sexism, and discrimination on the basis of sexual identity in health and disease are also integral to the fields of global and public health. These topical foci are likely to make the program attractive to students from minoritized and historically underrepresented racial/ethnic groups, women, and LGBTQIA+ students. Enrollment in the major will be open to all of Harpur's ~10,000 students, of whom 57% are women and 25%-28% are racial or ethnic minorities.

To ensure that students from historically disadvantaged groups have access to the program and find it welcoming, it will be widely announced to student groups and in undergraduate courses with high enrollment, with special attention to courses with content focusing on racial/ethnic minorities in the US. (E.g., Africana Studies and Asian/Asian-American Studies coursework is included among the program's coursework where the content is relevant, and the program will be advertised in these courses.) We will recruit students in partnerships with programs serving minoritized students (e.g., McNair Scholars, LSAMP, EOP) through these programs' mailing lists, meetings and events, and other venues. Students transferring from community colleges will be encouraged to consider the program, as these students are often from disadvantaged households.

Plans to retain under-represented students: We will work with the Uiversity Educational Institute to incorporate seminars/presentations (e.g., Cultural Competence, Stereotypes) into the program's weekly seminar series to build consensus among students around inclusion and equity. We will also work to keep the program reliant on teaching and leadership from a diverse group of faculty; this will help students to feel a sense of belonging in their courses and increase their comfort in seeking faculty assistance or advice.

Plans to recruit diverse faculty: Due to the interdisciplinary nature of this program, its students are likely to engage broadly with Harpur Arts and Sciences faculty, who are currently 43.6% women and 23.0% under-represented minority racial/ethnic groups (over half of URM faculty are Asian and Pacific Islander; 13% of Harpur faculty). Thus, broadening the diversity of the faculty will be an important component of attracting and retaining under-represented students. Hiring for this program is likely to be undertaken in partnership with other departments, programs, and initiatives within Harpur. For any hires dedicated to this program, we will ensure diversity in the hiring committee composition, advertise the position widely (e.g., sharing announcements to interest groups, such as the American Public Health Association's American Indian, Alaskan Native, and Native Hawaiian Caucus and LGBTQ Health Caucus), and ensure that the advertised areas of expertise are broad enough to encompass research interests that are more common among women and URM.