MPH program proposal, statement on diversity and inclusion:

Public health is by its very nature committed to diversity and inclusion.

Readers of the proposal would see that one of the key student learning outcomes, defined by the accreditation agency (CEPH) and included as a central goal in this program is:

Global Perspectives - Community Engagement & Cultural Context: Engage respectfully and effectively with diverse communities to promote the health of all members, appreciating the multi-layered cultural contexts of public health issues that shape health inequities, especially for individuals from marginalized, disadvantaged, underserved, and vulnerable populations.

Both focus options in the proposal emphasize efforts to analyze, understand, and remediate health inequities for diverse populations that have been historically underserved in both urban and rural settings.

Readers of the proposal would see that there is a plan to recruit and retain students from underrepresented groups:

Active recruitment efforts to reach historically underrepresented students for the MPH program will include travel, GRE name-buys, and personal outreach from public health faculty to colleagues at universities with large minority populations. Scholarship funds to support public health graduate study will be offered to historically underrepresented students with the strongest qualifications. Binghamton's "Clark Fellowships," drawing on state funds for underrepresented groups, will offer full tuition and a stipend to attract minorities to enter the MPH program.

Readers of the proposal would find that the program includes underrepresented faculty, tenured and retained on the campus for several years. Two senior faculty who will contribute to the program are graduates of MPH programs, which attract underrepresented students in part because of the inherent commitment to diversity and social justice that is part of all MPH programs.



# New Program Proposal: Graduate Degree Program

Form 2E

Version 2014-11-17

This form should be used to seek SUNY's approval and New York State Education Department's (SED) registration of a proposed new academic program leading to master's or doctoral degree. Approval and registration are both required before a proposed program can be promoted or advertised, or can enroll students. The campus Chief Executive or Chief Academic Officer should send a signed cover letter and this completed form (unless a different form applies¹), which should include appended items that may be required for Sections 1 through 6, 9 and 10 and MPA-1 of this form, to the SUNY Provost at program.review@suny.edu. The completed form and appended items should be sent as a single, continuously paginated document.² If Sections 7 and 8 of this form apply, External Evaluation Reports and a single Institutional Response should also be sent, but in a separate electronic document. Guidance on academic program planning is available here.

#### **Table of Contents**

NOTE: Please update this Table of Contents automatically after the form has been completed. To do this, put the cursor anywhere over the Table of Contents, right click, and, on the pop-up menus, select "Update Field" and then "Update Page Numbers Only." The last item in the Table of Contents is the List of Appended and/or Accompanying Items, but the actual appended items should continue the pagination.

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<sup>&</sup>lt;sup>1</sup>Use a <u>different form</u> if the proposed new program will lead to a graduate degree or any credit-bearing certificate; be a combination of existing registered programs (i.e. for a multi-award or multi-institution program); be a breakout of a registered track or option in an existing registered program; or **lead to certification as a classroom teacher**, **school or district leader**, **or pupil personnel services professional** (e.g., school counselor).

<sup>&</sup>lt;sup>2</sup>This email address limits attachments to 25 MB. If a file with the proposal and appended materials exceeds that limit, it should be emailed in parts.

| Section 1. Gener                  | cal Information  |  |
|-----------------------------------|--|--|
| a)                                | Date of Proposal:  | October 1, 2016  |
| Institutional Information         | Institution's 6-digit SED Code:  | 211000   |
|                                   | Institution's Name:  | Binghamton University (State University of New York at Binghamton)   |
|                                   | Address:   | PO Box 6000, Binghamton NY 13902-6000  |
|                                   | Dept of Labor/Regent's Region:   | Southern Tier  |
| b)<br>Program                     | List each campus where the entire progressive 6-digit SED Code): Binghamton University | am will be offered (with each institutional or branch campus rsity; 211000   |
| Locations                         | List the name and address of off-campus courses will offered, or check here [ X        | s locations (i.e., extension sites or extension centers) where ] if not applicable:                                  |
| c)                                | Program Title:   | Public Health  |
| Proposed<br>Program               | <u>Award</u> (s) (e.g., M.A., Ph.D.):  | M.P.H.   |
| Information                       | Number of Required Credits:  | Minimum [ 48 ] If tracks or options, largest minimum [ ]   |
|                                   | Proposed <u>HEGIS Code</u> :   | 1214.00  |
|                                   | Proposed 6-digit CIP 2010 Code:  | 51.2208  |
|                                   | If the program will be accredited, list the (Council on Education for Public Health    | e accrediting agency and expected date of accreditation: CEPH a); 9/2018   |
|                                   | If applicable, list the SED professional l   | icensure title(s) <sup>3</sup> to which the program leads:   |
| d)<br>Campus                      | Name and title: Susan Strehle, Vice Pro  | vost and Dean of the Graduate School   |
| Contact                           | Telephone: (607) 777-2070  | E-mail: sstrehle@binghamton.edu  |
| e)<br>Chief Executive<br>or Chief |  | net all applicable campus administrative and shared governance itution's commitment to support the proposed program. |
| Academic                          | Name and title: Donald G. Nieman, Exe  | cutive Vice President and Provost  |
| Officer<br>Approval               | Signature and date:  | 11/17/16   |
|                                   | If the program will be registered joint information for <u>each</u> institution:       | tly <sup>4</sup> with one or more other institutions, provide the following  |
|                                   | Partner institution's name and 6-digit SI  | ED Code:   |
|                                   | Name, title, and signature of partner inst<br>this proposal):                          | titution's CEO (or <b>append</b> a signed letter indicating approval of  |

<sup>&</sup>lt;sup>3</sup> If the proposed program leads to a professional license, a <u>specialized form for the specific profession</u> may need to accompany this proposal. <sup>4</sup> If the partner institution is non-degree-granting, see SED's <u>CEO Memo 94-04</u>.

#### Attestation and Assurances

On behalf of the institution, I hereby attest to the following:

That all educational activities offered as part of this proposed curriculum are aligned with the institutions' goals and objectives and meet all statutory and regulatory requirements, including but not limited to Parts 50, 52, 53 and 54 of the Rules of the Board of Regents and the following specific requirements:

That credit for study in the proposed program will be granted consistent with the requirements in §50.1(o).

That, consistent with §52.1(b)(3), a reviewing system has been devised to estimate the success of students and faculty in achieving the goals and objectives of the program, including the use of data to inform program improvements.<sup>5</sup>

That, consistent with §52.2(a), the institution possesses the financial resources necessary to accomplish its mission and the purposes of each registered program, provides classrooms and other necessary facilities and equipment as described in §52.2(a)(2) and (3), sufficient for the programs dependent on their use, and provides libraries and library resources and maintains collections sufficient to support the institution and each registered curriculum as provided in §52.2(a)(4), including for the program proposed in this application.

That, consistent with 52.2(b), the information provided in this application demonstrates that the institution is in compliance with the requirements of §52.2(b), relating to faculty.

That all curriculum and courses are offered and all credits are awarded, consistent with the requirements of §52.2(c).

That admissions decisions are made consistent with the requirements of §52.2(d)(1) and (2) of the Regulations of the Commissioner of Education.

That, consistent with §52.2(e) of the Regulations of the Commissioner of Education: overall educational policy and its implementation are the responsibility of the institution's faculty and academic officers, that the institution establishes, publishes and enforces explicit policies as required by §52.2(e)(3), that academic policies applicable to each course as required by §52.2(e)(4), including learning objectives and methods of assessing student achievement, are made explicit by the instructor at the beginning of each term; that the institution provides academic advice to students as required by §52.2(e)(5), that the institution maintains and provides student records as required by §52.2(e)(6).

That, consistent with §52.2(f)(2) of the Regulations of the Commissioner of Education, the institution provides adequate academic support services and that all educational activities offered as part of a registered curriculum meet the requirements established by state, the Rules of the Board of Regents and Part 52 of the Commissioner's regulations.

| CHIEF ADMINISTRATIVE or ACADEMIC OFFICER/ PROVOST  |                                |
|--|--------------------------------|
| Signature  | Date November 17, 2016         |
| Type or print the name and title of signatory  Donald G. Nieman, Executive Vice President for Academic Affairs and Provost | Phone Number<br>(607) 777-2141 |

<sup>5</sup> The NY State Education Department reserves the right to request this data at any time and to use such data as part of its evaluation of future program registration applications submitted by the institution.

#### **Section 2. Program Information**

#### 2.1. Program Format

Check all SED-defined formats, mode and other program features that apply to the entire program.

- a) Format(s): [X]Day []Evening []Weekend []Evening/Weekend []Not Full-Time
- b) Modes: [X ]Standard [ ]Independent Study [ ]External [ ]Accelerated [ ]Distance Education NOTE: If the program is designed to enable students to complete 50% or more of the course requirements through distance education, check Distance Education, see Section 10, and append a <u>Distance Education Format Proposal</u>.
- c) Other: [ ] Bilingual [ ] Language Other Than English [ ] Upper Division [ ] Cooperative [ ] 4.5 year [ ] 5 year

#### 2.2. Related Degree Program

**NOTE:** This section is not applicable to a program leading to a graduate degree.

#### 2.3. Program Description, Purposes and Planning

a) What is the description of the program as it will appear in the institution's catalog?

The Master of Public Health program prepares graduates to analyze complex public health issues and to work collaboratively to create healthier communities in New York and throughout the world. With a focus on healthy communities and diverse populations both local and global, the program educates students who can integrate the knowledge and values of public health into careers in a variety of fields. Through a transdisciplinary approach integrating classroom learning, academic research, interprofessional collaborations and community engagement, it prepares graduates to understand the social, cultural, and environmental contexts that impact health and to develop evidence-based solutions for critical health problems.

b) What are the program's educational and, if appropriate, career objectives, and the program's primary student learning outcomes (SLOs)? NOTE: SLOs are defined by the Middle States Commission on Higher Education in the Characteristics of Excellence in Higher Education (2006) as "clearly articulated written statements, expressed in observable terms, of key learning outcomes: the knowledge, skills and competencies that students are expected to exhibit upon completion of the program."

The program aims to prepare well-educated, theoretically-informed, ethical, culturally competent, and skillful public health professionals who can apply their knowledge to create improved solutions to public health challenges. They will develop sound professional judgment and the competencies needed to work as contributing members of an interprofessional team. They will be self-directed lifelong learners who can adapt to changing needs and conditions in the field.

The MPH program will prepare graduates to be effective leaders and practitioners with the knowledge, skills, and attitudes they need to assess public health needs, design, implement, and evaluate programs, and conduct applied research to assess and meet the public health needs of their communities. Employment opportunities abound in New York for public health graduates; these include public health departments at county and state levels, as well as insurance and pharmaceutical companies. Top industry employment occurs in colleges and universities; medical and surgical hospitals; home health care; physicians' offices; individual and family services; outpatient care centers; community health programs, and nursing care facilities.<sup>5</sup>

The program develops its primary student learning outcomes out of the accreditation standards developed by CEPH, the Council on Education for Public Health. In mapping student learning outcomes in coursework to program SLOs, we have chosen to articulate these in terms of the core competencies students must achieve in order to be effective

<sup>&</sup>lt;sup>5</sup> JobsEQ: http://wwww.chmuraecon.com/jobseq

practitioners in public health.

- 1. *Scientific Foundations for Public Health Practice:* Employ a broad mastery of the five core areas of public health including application of empirical methods and practice approaches to promote and protect the health of individuals, communities, and populations.
- 2. *Health Promotion and Disease Prevention:* Use relevant strategies and appropriate methods to identify current and emerging public health challenges, to analyze determinants of health and disease, and to plan, implement, and evaluate evidence-based public health programs and policies that promote health and prevent disease across the lifespan.
- 3. Scholarship & Research for Evidence-Based Public Health Practice: Conduct scholarly activities and scientifically rigorous research designed to solve public health problems, address health inequities, eliminate health disparities, and improve the health and well-being of individuals, communities, and populations.
- 4. *Global Perspectives Community Engagement & Cultural Context:* Engage respectfully and effectively with diverse communities to promote the health of all members, appreciating the multi-layered cultural contexts of public health issues that shape health inequities, especially for individuals from marginalized, disadvantaged, underserved, and vulnerable populations.
- 5. *Information & Health Technologies for Public Health:* Leverage information and health technologies to achieve improvements in public health systems, infrastructure, and services including systems designed for surveillance of public health threats and monitoring of health outcomes.
- 6. *Inter-professional Collaboration for Improving Health Outcomes:* Collaborate with professionals from across disciplines working interdependently as a constructive public health team member fostering organizational and community partnerships to achieve improvements in health outcomes for individuals, communities, and populations.
- 7. **Public Health System Leadership:** Demonstrate organizational and leadership skills aimed at transforming public health infrastructure and creating healthier environments through dynamic systems thinking, effective written and verbal communication, efficient project management and capacity building, and responsible stewardship of resources.
- 8. **Public Health Policy & Advocacy for Health Equity:** Advocate for social justice and health equity through use of participatory strategies, inclusive partnerships, high impact media communications, and translation of scientifically rigorous research into public health policies, programs, and practices that yield measureable improvements in population health and elimination of health disparities.
- 9. *Ethical Public Health Practice:* Exhibit personal and professional integrity in all areas of public health education, research, and service that is reflective of the values, ideals, and ethical standards that define public health practice.
- c) How does the program relate to the institution's and SUNY's mission and strategic goals and priorities? What is the program's importance to the institution, and its relationship to existing and/or projected programs and its expected impact on them? As applicable, how does the program reflect diversity and/or international perspectives? For doctoral programs, what is this program's potential to achieve national and/or international prominence and distinction?

Binghamton University's mission combines academic excellence and public service. As our Road Map strategic plan explains, "Binghamton University is a premier public university dedicated to enriching the lives of people in the region, state, nation and world through discovery and education and to being enriched by partnerships with those communities."

The proposed program in public health (PPH) will make significant contributions to our missions in both academic excellence and public service. It will offer college graduates an opportunity to pursue an excellent academic program, unique in its multi-disciplinary character and drawing on an outstanding research faculty, in a field defined by its commitment to public service through health. As one of the SUNY-system university centers, Binghamton has been a leader in graduate education for decades, with a distinguished record of graduate education in professional fields as

well as arts and sciences. Our proposal to increase graduate enrollments has been approved by SUNY-system and by the NYS Governor's office. Our expansion in health care fields has recently led to the development of a School of Pharmacy, where research and practice will contribute to better and healthier lives in the community. Collaborating with our existing graduate programs in nursing, biomedical anthropology, psychology, and social work, as well as the emerging program in pharmacy, the proposed PPH will enable a wide range of inter-professional health care learning experiences for students. More important, the program will also help to meet rapidly expanding local, state, national, and global needs for more professionals in the field of public health and thus it will enrich and enhance people's lives.

Binghamton University has developed an increasingly focus on health sciences. Through our strategic planning process (the Road Map), Binghamton has developed an academic focus on Transdisciplinary Areas of Excellence, called "TAEs," that have generated intensive collaboration across disciplinary lines. This campus climate makes Binghamton an ideal location for a program in public health, which by definition requires and emphasizes learning and thinking across disciplines. One of the five "TAEs" is Health Sciences; its steering committee brings together researchers from 9 different departments and 5 different schools. Public health is thus a logical and inevitable next step for Binghamton University, as well as an important step forward in our projected development of a Health and Science Technology Park in Johnson City.

The program in public health will draw together and enhance several existing programs in related health areas. Since the MPH is often taken as a second degree supporting studies in medicine, social work, nursing, pharmacy, or biomedical anthropology, we expect it to serve as an inter-professional bridge for several fields and to increase opportunities for studies in public health issues.

The program will address diversity and international perspectives through its study of "public" health issues, which are diverse and inclusive by nature. Further, with one of two concentrations focused on global health, and with faculty whose research explores health issues among minority, immigrant, and refugee communities, the program will offer a specialization in comparative health problems and solutions at an international level.

**d**) How were faculty involved in the program's design? Describe input by external partners, if any (e.g., employers and institutions offering further education?

The program was designed by a group of faculty, many of them graduates of MPH programs as well as doctoral programs, from several departments in different schools. The program design committee consisted of faculty from the Decker School of Nursing, the department of Africana Studies (Harpur College of Arts and Sciences), the departments of human development and social work (in the College of Community and Public Affairs), the program in biological anthropology in the department of anthropology (Harpur College), and the former chair of our Health Sciences TAE, then a faculty member in behavioral neuroscience and currently interim dean of Harpur College.

Existing faculty strengths shaped the design of the program: Binghamton faculty have been working in the areas of global and population health for years, and their research interests, contacts, and commitments led to the design of a generalist program with focus areas in global and population health. All MPH programs need a strong generalist core, and faculty at Binghamton are already teaching courses in all five of the core areas designated by CEPH. Indeed, Binghamton's status as a graduate destination-of-choice for international students has already made a focus on global health practical; existing faculty teach current courses on global health policy and practices. Binghamton's growth in studies of data analytics has also made population health a logical choice of focus; existing faculty teach current courses on population health research and analysis. While public health versions of these courses will take a somewhat different emphasis, we plan to draw on existing expertise among a large group of current tenured or tenure-track faculty.

Binghamton faculty have a long history of collaborations with external partners in research on health issues, and their connections will benefit students in the MPH program. For example, students interested in global health issues will want practica placements in other countries. Dr. Ralph Garruto, an eminent faculty member in the MPH Program, has in place a Memorandum of Agreement (MOA) between Binghamton University and the Ministry of Health of the Republic of Vanuatu, where he will be able to take MPH students for their required practica to work with the Ministry of Health or to work in research on the Vanuatu Health Transition Project studying factors leading to the emergence of non-communicable diseases such as diabetes and heart disease, with research sites on multiple islands in the archipelago. Other international research sites where he is conducting research are likely to provide opportunities for students to do required practica; these include Ukraine (Chernobyl) studying chronic radiation exposure and birth

defects and Palau in Micronesia working on the high incidence of suicide with Dr. Koji Lum. Dr. Katherine Wander, another faculty member teaching in the MPH program, can potentially mentor MPH students to do their required practica in rural Africa in Kilimanjaro, Tanzania at the Clinical Research Institute, at local dispensaries, at the large regional hospital, Kilimanjaro Christian Medical Center, and in the future at research sites in China and Bangladesh. Thus, external partners in academic research will help insure that all required practica can be done locally, regionally or globally for the proposed program.

We consulted by telephone with Dr. Alberto Cardelle, Professor and Dean of the College of Health Sciences at East Stroudsburg University and Director of the Institute for Public Health Research and Innovation. Dr. Cardelle has served on accreditation site visit teams, and international health is one of his areas of specialization. We received helpful advice from him about a range of issues including curriculum, internship placements, employment opportunities, and specializations.

e) How did input, if any, from external partners (e.g., educational institutions and employers) or standards influence the program's design? If the program is designed to meet specialized accreditation or other external standards, such as the educational requirements in <a href="Commissioner's Regulations for the profession">Commissioner's Regulations for the profession</a>, append a side-by-side chart to show how the program's components meet those external standards. If SED's Office of the Professions requires a <a href="Sepecialized form">Sepecialized form</a> for the profession to which the proposed program leads, append a completed form at the end of this document.

The program is designed to meet the accreditation standards of CEPH, the Council on Education for Public Health. We consulted CEPH documents closely as we developed the proposal, insuring that the curricular design included all of the elements important to successful accreditation.

As noted above, we consulted with a then-current professor and dean in a Public Health Program, Dr. Alberto Cardelle, who advised us regarding valuable concentrations for the program, about the selection of program evaluators, about curriculum and internships, as well as employment in the field.

We consulted with the former (Claudia Edwards) and current (Sean Britton) directors of the Broome County Health Department; from them, we learned that of 100 employees in the department, only 3 have an MPH degree, and many others would seek one if we offered a local program. They expressed enthusiasm for the addition of the degree program at Binghamton University and willingness to help us in various ways. We also consulted with the Medical Director of the Broome County Health Department, who is going to teach some courses in the program.

Additionally, the Broome County Health Department helped us identify over 24 local sites where we could place MPH students for their required practica. This is in addition to regional sites in New York State including the health departments of Madison, Oneida, and Onondaga where we have previously placed non-MPH graduate students and in the six-county region of the Upper Susquehanna River basin and Southern Tier of New York (Broome, Chenango, Delaware, Otsego, Tioga and Tompkins) where we currently are conducting research on Lyme disease and have contact with these health departments.

We have also consulted with several regional county health departments and service agencies, many of which have offered enthusiastic support for the program and written letters indicating their interest in placing students in internships. See Appendix A.

Our external evaluators, Dr. Rosemary Caron and Dr. Resa Jones, had a major impact on the program proposal, especially in helping us to align the curriculum structure and design with CEPH's newly emerging standards in preparation for accreditation. In particular, we have revised our original plan for programs leading to two concentrations to a single generalist program where students can choose to focus in one of these two areas through a broader selection of electives. In their generous advice to us, they helped strengthen the current proposal. See also Appendix G for our institutional response.

f) Enter anticipated enrollments for Years 1 through 5 in the table below. How were they determined, and what assumptions were used? What contingencies exist if anticipated enrollments are not achieved?

We anticipate admitting cohorts of approximately 20-25 students each year, who will take a full time courseload and

graduate from the program in two years. The numbers below reflect the expectation that we will begin with somewhat smaller classes and achieve the expected size over a few years. Our expectations are based on the level of interest expressed in health careers by Binghamton University undergraduates: close to a third of the entering freshman class (or about 800 students per year) register each fall with the "pre-health" advisor. We believe that the affordable SUNY tuition for the program is likely to attract applicants.

If enrollments are not achieved, the program will grow more slowly than we forecast here.

|      | Anticipat | Estimated |    |    |
|------|-----------|-----------|----|----|
| Year | Full-time | FTE       |    |    |
| 1    | 20        | 2         | 22 | 22 |
| 2    | 40        | 2         | 42 | 42 |
| 3    | 44        | 2         | 46 | 46 |
| 4    | 48        | 2         | 50 | 50 |
| 5    | 48        | 2         | 50 | 50 |

g) Outline all curricular requirements for the proposed program, including prerequisite, core, specialization (track, concentration), internship, capstone, and any other relevant component requirements, but do not list each General Education course.

The curricular requirements listed below cover the 5 core areas required for CEPH accreditation, plus three "selectives" courses within each of two focus areas (global health and population health), plus 2 electives enabling students to advance their knowledge in general areas and/or in the focus areas. The program has 48 total required credits. Required courses do not have prerequisites for students admitted to the program, though individual students with deficiencies in specific areas could be advised to take additional coursework to insure their success in the program and in eventual practice.

<u>Public Health courses:</u> 1 foundation, 6 core, 2 general electives, 3 required short experiential practica, 3 electives defining a focus, 1 practicum/ capstone course

- PH 510: Foundations of Public Health (foundation, required)
- PH 512: Social & Behavioral Sciences in Public Health (core)
- PH 515: Biostatistics (core)
- PH 518: Environmental Health (core)
- PH 520: Epidemiology I, Principles & Methods (core)
- PH 522: Health Policy, Finance, & Management (core)
- PH 525: Epidemiology II, Applied Epidemiology (case-based, integrating all core disciplines)
- PH 501, 502, 503: Experiential Public Health (required, interprofessional education practica; the first emphasizes socialization and expectations, the second the application of methods to solving problems, and the third policy analysis and advocacy)
- PH 595: Practicum & Capstone, emphasis on global health (required, internship and final project, 9 credits)

PH 597: Practicum & Capstone, emphasis on population health (required, internship and final project, 9 credits)

- PH 517: Public Health Biology (elective; may be required for students lacking previous background)
- PH 524: Program Planning & Evaluation (elective)
- PH 530: Global Health I, Foundations & Research Methods (selective, global focus)
- PH 535: Global Health II, Determinants & Disparities (selective, global focus)
- PH 538: Global Health III, Global Health Policy (selective, global focus)
- PH 550: Topics in Global Health (selective, global focus)
- PH 540: Population Health I, Foundations & Research Methods (selective, population focus)
- PH 545: Population Health II, Determinants & Disparities (selective, population focus)
- PH 548: Population Health III, Policy & Evidence-based Strategies (selective, population focus)

- h) Program Impact on SUNY and New York State
- **h)(1)** *Need:* What is the need for the proposed program in terms of the clientele it will serve and the educational and/or economic needs of the area and New York State? How was need determined? Why are similar programs, if any, not meeting the need?

Substantial data confirms the need for additional high quality MPH programs and more well-educated MPH graduates; the levels of need are very high in national, state, regional and local areas. As a result, the job outlook for graduates of MPH programs is unquestionably bright. Because of Binghamton University's expanding investments in life-science research and health-related programs, our concurrent establishment of a School of Pharmacy and Pharmaceutical Sciences and expanding programs in nursing and social work, we will prepare job-ready public health graduates to meet critical needs.

The US Bureau of Labor Statistics writes that "employment of healthcare occupations is projected to grow 19 percent from 2014 to 2014, much faster than the average for all occupations, adding about 2.3 million new jobs. Healthcare occupations will add more jobs than any other group of occupations" because of an aging population and increased availability of health insurance. (www.bls.gov/ooh/healthcare/home.htm)

Robert Sanchez, MPH, posts an article (<a href="http://mphprogramslist.com/what-is-the-salary-outlook-for-mph-program-grads/">http://mphprogramslist.com/what-is-the-salary-outlook-for-mph-program-grads/</a>) making the following claims:

- The Association of Schools of Public Health estimates that 250,000 more public health workers will be needed by 2020;
- The public health workforce has diminished, with 50,000 fewer workers in 2000 than in 1980;
- Of the current workforce, 23% (about 110,000 workers) were eligible to retire in 2012;
- To replenish the workforce, public health programs need to train 3 times the current number of graduates over the next 11 years.

More recently, "Government Jobs" lists 1205 open jobs in public health in August, 2016. (https://www.governmentjobs.com/jobs?keyword=Public%20Health)

Because public health needs emerge and change rapidly in a connected globe, demand will increase for practitioners ready to address transnational health problems through prevention at individual, community, and societal levels, health education, and policy development. Binghamton's historic strengths in nursing, focused on underserved populations in rural settings, can provide MPH students a vital understanding of measures for developing improved programs for rural health management in other countries around the world. Biomedical anthropology faculty study population health, international health, and environmental health issues and can provide MPH students important knowledge of public health issues. Local public health issues include high rates of obesity, diabetes, and addiction to opioid drugs, as well as other chemical dependencies. Increasingly, doctors and social workers, public administrators and hospital managers find that they need the knowledge and skills that come with further education in a public health program. The need for a new public health program in New York State can hardly be clearer; with Binghamton University's reputation for academic excellence, we will attract very strong students and develop an outstanding program.

Nationally, CEPH accredits 108 programs in public health as well as 56 schools of public health. Another 52 applications for accreditation are currently pending: this number suggests the expansion of interest in studies in the field, as well as the rich supply of jobs for professional practitioners. Binghamton University is positioned to add a strong program and to recruit some of our outstanding undergraduates, as well as students from other universities, to go into the public health field.

The largest SUNY MPH program is offered at the school of public health at SUNY Albany, which draws on a consortial agreement with the New York State Department of Health to offer a comprehensive program with concentrations in all five core areas plus biomedical sciences. This large and growing program enrolled 223 students in fall 2015. Schools of public health offering MPH degree programs also exist at SUNY Buffalo (69 students in fall

2015) and SUNY Downstate (105 students). Programs in public health enroll students at Stony Brook (57 students) and SUNY Upstate Medical (in consortium with Syracuse University, 43 students).

There are several reasons why adding another program at a graduate university like Binghamton is a wise investment for New York state and the SUNY system. First, public health programs are dedicated to improving community and population health and therefore reducing the costs of health care, so an MPH degree is an investment in better health at lower costs. MPH graduates work in many different fields, all of which contribute to greater understanding and efficiency in disease prevention, the improvement of medical services, and community health.

A second major reason to add a Program in Public Health at Binghamton is the expanding need at every level from local to global for public health professionals. The Affordable Care Act, coupled with an aging "baby boom generation," added to the ballooning of chronic diseases like diabetes and of public health crises like substance abuse, have led to increased need for educated professionals with public health knowledge, values and skills. In New York, Medicaid redesign is leading to the implementation of "DSRIP": the Delivery System Reform Incentive Payment Program. As a result, within five years, health care services in New York will move from a fee-for-service to a value-based performance system, creating new incentives and adding urgent demand for better public health programs in prevention, disease management, and public education. With increasing global connections, the rise of the Zika virus and its devastating impact in Brazil have led to urgent concerns in the U.S.; public health professionals will be needed to respond to health crises that arise elsewhere and migrate quickly.

The total enrollment in all SUNY campus MPH programs is only 497 students, a small and clearly insufficient number to respond to the growing needs of a population of almost 20 million New Yorkers, some of them recent arrivals from places where public health is under-served. A highly selective Binghamton University program will offer strong students access to excellent education in public health. Indeed, given the historic strengths of Binghamton's undergraduate students, who are likely to consider public health careers once we have a program, we may be able to add excellent practitioners to the field.

Several schools and programs in public health are registered in New York, according to the "Inventory of Registered Programs" of the State Education Department. Including SUNY and CUNY, there are 16 programs in the downstate area; 4 programs in the Albany and capital region; and 3 in the Buffalo and western region. Only 1 program offers an MPH in our region: the consortial program offered by SUNY Upstate and Syracuse University has enrollments of only 43 in fall 2015. Cornell's College of Veterinary Medicine submitted a Letter of Intent to establish a program linking human, animal, and environmental health in October 2015; Cornell's very different proposal, focused on infectious disease and food systems, anticipates enrollments of 40.

Binghamton's proposed program does not duplicate those offered by any of the other SUNY centers. SUNY programs at Upstate, Downstate, Buffalo, Stony Brook and Albany do not offer the opportunity to focus on global health through a series of "selectives" courses. With its strong international enrollments and reputation for excellence in international education, Binghamton has tenured and tenure-track faculty working in the area of global health; faculty health-related research in Africa, Asia, the South Pacific, and other global areas will provide strong support for the focus on global health. None of the other SUNY centers offers a focus on population health, either; while Stony Brook offers "health analytics" and Albany and Downstate offer "biostatistics," our "selectives" in the population health area draw on statistical analysis in applied studies and focus on improving health policy, programs, and outcomes with the aid of analytics.

Of the 24 institutions currently offering MPH programs in New York State, 13 are not yet accredited by CEPH; these include programs at Adelphi, Daemen, Excelsior, Monroe, St. John's, Touro, Union, and Yeshiva. While some of these programs have submitted applications to CEPH, at present only 11 colleges and universities offer MPH programs that have met accreditation standards. Clearly, there is not only *room*, but even *need*, for a high quality program in New York, and especially in this central/ southern tier region.

In exploring student demand for the program, we found clear evidence that the program will attract very strong students. First, Binghamton's undergraduate population includes some of the best students in the United States; 33,000 applicants compete for 2,500 freshman admissions; they enter with SAT scores averaging 1305, placing Binghamton 5<sup>th</sup> in the country in average entering student achievement on this test. Of the 2,500 who enter, about a third, or 800 each year, register to receive "pre-health" advising; these numbers appear too in registrations for the

typical pre-med curriculum including chemistry, biology, and calculus. In surveys of graduating seniors over the past five years, the percentage of graduates who report that they have been admitted to medical school ranges from 5% to 12%; many other graduating seniors choose to pursue health-related fields outside of medicine. Because of the availability of jobs in a variety of public health areas, students will find the MPH program attractive.

Further evidence for student demand for the program was found on the Binghamton Graduate School website. We studied searches on our site for graduate programs not offered at Binghamton: the top ranked search for the past 5 years have looked for an MPH program. At least 50 students per year have looked for an MPH at Binghamton.

At the graduate level, Binghamton is a global university: in fall 2015, 43% of the graduate student body was international. Outstanding graduate faculty and programs, comparatively affordable tuition, and some of the most attractive living expenses in the United States have drawn international students to the Binghamton campus. Our choice to offer a focus on global health combines faculty research strengths in this area with an awareness that international students want a public health program that prepares them for careers across the globe. Since global health issues (like Zika and AIDS, for example) rapidly become national and local health issues, we plan to invest faculty expertise in improving public health across borders.

**h)(2)** *Employment:* For programs designed to prepare graduates for immediate employment, use the table below to list potential employers of graduates that have requested establishment of the program and state their specific number of positions needed. If letters from employers support the program, they may be **appended** at the end of this form.

National employers of graduates of MPH programs include Centers for Disease Control and Prevention; State and County Departments of Public Health; the National Institute of Health; hospitals, medical facilities, managed care organizations, nursing homes, community health clinics; community-based organizations and non-governmental organizations. Specific projections of need for employees in these positions are not readily available; we cite figures below from the US Bureau of Labor Statistics.

|  | Need: Projecte                           | ed positions                           |
|--|--|--|
| Employer   | Ten year<br>employment percent<br>growth | Ten year<br>projected<br>number of new |
| Environmental science and protection technician, including | 9%                                       | <b>jobs</b><br>3,400                   |
| health   | 7/0                                      | 3,400                                  |
| Environmental science specialists, including health        | 11%                                      | 10,200                                 |
| Epidemiologist   | 6%                                       | 400                                    |
| Health educators   | 12%                                      | 7,500                                  |
| Community health workers                                   | 15%                                      | 8,100                                  |
| Health specialist teachers, post-secondary                 | 19%                                      | 40,000                                 |
| Healthcare social workers                                  | 19%                                      | 30,900                                 |
| Mental health & substance abuse social workers             | 19%                                      | 22,300                                 |
| Medical and health service managers                        | 17%                                      | 56,300                                 |

h)(3) Similar Programs: Use the table below to list similar programs at other institutions, public and independent, in the service area, region and state, as appropriate. Expand the table as needed. NOTE: Detailed program-level information for SUNY institutions is available in the Academic Program Enterprise System (APES) or Academic Program Dashboards. Institutional research and information security officers at your campus should be able to help provide access to these password-protected sites. For non-SUNY programs, program titles and degree information – but no enrollment data – is available from SED's Inventory of Registered Programs.

The institutions below offer CEPH-accredited MPH programs in New York State.

| Institution           | Program Title | Degree | 2015 Enrollment |
|-----------------------|---------------|--------|-----------------|
| University at Albany  | Public Health | MPH    | 223             |
| University at Buffalo | Public Health | MPH    | 69              |
| Downstate Medical     | Public Health | MPH    | 105             |
| Stony Brook           | Public Health | MPH    | 57              |
| Upstate Medical       | Public Health | MPH    | 43              |

| Columbia                 | Public Health | MPH |  |
|--------------------------|---------------|-----|--|
| CUNY                     | Public Health | MPH |  |
| NYU                      | Public Health | MPH |  |
| NY Medical College       | Public Health | MPH |  |
| Icahn School of Medicine | Public Health | MPH |  |
| University of Rochester  | Public Health | MPH |  |

**h)(4)** Collaboration: Did this program's design benefit from consultation with other SUNY campuses? If so, what was that consultation and its result?

We focused our consultation on the accreditation agency's standards and did not consult with other SUNY campuses, beyond the filing of our Letter of Intent in November, 2015. The LOI was distributed to all campuses in SUNY and no concerns were reported.

**h)(5)** *Concerns or Objections:* If concerns and/or objections were raised by other SUNY campuses, how were they resolved?

No concerns or objections were raised.

#### 2.4. Admissions

a) What are all admission requirements for students in this program? Please note those that differ from the institution's minimum admissions requirements and explain why they differ.

All students applying to graduate programs submit their application materials through the Graduate School. Application materials include an application form, transcripts, GRE scores (quantitative scores will be important), two letters of recommendation, a personal statement, and a resume. Students are expected to have a GPA of 3.0 or above and a successful background in quantitative coursework. International applicants must also submit results from either TOEFL (minimum score of 90) or IELTS (minimum score in band seven) or PTE Academic (minimum score of 70) unless they have received a college or university degree from a U.S. institution or an institution in a country whose native language is English.

Because the faculty contributing to this program come from several different departments and schools, a rotating admissions committee consisting of 4 faculty from different departments who teach in the program will be created, with members serving for terms of 2 or 3 years. Working with the program director, this committee will set specific application requirements for the MPH program; it will set expectations for GRE scores and define specific requirements for admission including potential essay questions to supplement the personal statement and additional letters of recommendation. It may interview student applicants. The committee will review application materials and recommend admission for students whose qualifications meet or exceed the program's standards. In selecting candidates for admission, the committee will strive for both academic excellence and diversity (of race/ethnicity, gender, field of interest within public health, etc.). No standard will be applied that differs from Binghamton University's minimum admissions requirement.

Our plans call for admitting cohorts of about 25 students per year, consisting primarily of recent college graduates who will attend full time and complete the program in two years. The cohort model will strengthen opportunities for group learning and broaden the experiences of students; it will also enable effective resource planning, including the important practicum and capstone experiences. We recognize, however, that MPH degrees are also sought by and important for developing professionals who work full time, including doctors, nurses, social workers, public health department workers, and others; these students will enrich the cohorts by their presence, but they will necessarily attend part time. Part time attendance at Binghamton can range from one-credit marking continuous registration (during a semester when a student's work responsibilities make coursework impossible, for example) to 3, 6, or 9 credits of coursework when a full load of 12 credits is not manageable. Binghamton policies call for students to complete master's degrees within 5 years after admission; however, for working part-time students, exceptions and extensions can be approved. Students with special needs, including medical needs, also receive extensions of the time limits and leaves of absence when appropriate.

**b)** What is the process for evaluating exceptions to those requirements?

While we do not anticipate any exceptions in this competitive program, the faculty committee overseeing admissions will evaluate applicants, set criteria for admissions, and evaluate any exceptions to the requirements. They will track the success of graduates from the program and use this data to evaluate applicants requesting exceptions as the program evolves.

c) How will the institution encourage enrollment in this program by persons from groups historically underrepresented in the institution, discipline or occupation?

The Graduate School currently recruits applicants to all programs from historically underrepresented groups by attending recruitment fairs dedicated to minority students, by visiting colleges and universities where underrepresented students attend in large numbers, and by emphasizing the affordability of a Binghamton education. At the same time, 36% of our undergraduate students come from historically underrepresented groups, and we anticipate a high level of interest in this program from Binghamton graduates.

Active recruitment efforts to reach historically underrepresented students for the MPH program will include travel, GRE name-buys, and personal outreach from public health faculty to colleagues at universities with large minority populations. Scholarship funds to support public health graduate study will be offered to historically underrepresented students with the strongest qualifications. Binghamton's "Clark Fellowships," drawing on state funds for underrepresented groups, will offer full tuition and a stipend to attract minorities to enter the MPH program.

**d)** What is the expected student body in terms of geographic origins (i.e., same county, same Regents Region, New York State, and out-of-state); academic origins; proportions of women and minority group members; and students for whom English is a second language?

We expect to enroll a large number of students from the Northeast and especially from New York State; we believe that our own undergraduates will be eager to apply to this program because of their interest in health-related fields. The instate tuition rates offered by a high quality program at Binghamton are likely to make this MPH affordable and attractive to students who have or can obtain New York residency.

Our student body is not only very diverse but also broadly global: 28.9% are students of color, and they come from 100 different countries and all 50 states; as freshmen, they place in the top 5% of college-going students nationwide. They are evenly split between men and women, and many of them are first-generation college attendees in their families and first-generation speakers of English. Affordable SUNY tuition will enable the program to attract applicants from marginalized and under-represented groups, including Binghamton University undergraduates.

Because this program focuses on public health, clearly a vital need and a growth area for professional jobs, we expect to receive a significant number of applications and to establish a highly selective admissions process, choosing approximately 25 students for each entering cohort. The Graduate School follows an active recruiting schedule, attending over 90 college fairs and recruiting events each year; these include some conferences in major cities dedicated to graduate recruiting of applicants from historically underrepresented groups. Recruiting materials for the MPH program will be developed and a website will be created.

A survey of current juniors and seniors supported the belief that Binghamton undergraduates would be interested in an MPH program. Without any marketing or explaining the benefits of such a program, we asked 8,332 students whether they would be interested in pursuing an MPH degree at Binghamton: 171 said yes, and as many as 255 indicated an interest in learning more about the core areas of public health. With some campus marketing, we would have a strong pool of applicants just from Binghamton University; and of course we market programs nationally and internationally so programs can select the best students from a diverse pool.

Students for whom English is a second language will find strong support services on campus. With an established ESL program and a new TESOL program, Binghamton has resources dedicated to helping English language learners. With a focus on global health issues, the program is likely to attract some international students who are learning English; the applied health focus of the program is expected to make it attractive to women, minorities, and students from other nations.

#### 2.5. Academic and Other Support Services

a) Summarize the academic advising and support services available to help students succeed in the program.

Academic advising will be done by the faculty, as in most other graduate programs on campus. The faculty committee of four that serves (with the program director) as an admission committee will also serve as advisors to students, providing information, resolving problems, and helping students with academic questions. Students will do a self-assessment of their competencies at the start of the program and at the end of each semester. Students' progress will also be monitored each semester by the program director, with the goal of connecting any student who encounters difficulty in classes to tutoring help where appropriate. Students will be required to maintain a 3.0 average in order to be placed in external internships; the program faculty will develop additional procedures for identifying and supporting students who encounter difficulties in the coursework. For other forms of advising, including external placements and career opportunities, the faculty program director will be assisted by an assistant director, who will oversee placements and assessment, and by faculty aligned with their career interests.

The Fleishman Center for Career and Professional Development runs regular workshops to help students design a resume, apply for and interview for jobs, and research career opportunities. Students in the program will also be supported by the Graduate Community of Scholars, which offers regular programs designed to help graduate students prepare for the job market at many different levels in various fields. The office of International Student and Scholar Services (ISSS) assists all international students in gaining initial visas for US entry, permission for Optional Practical Training, and information required in emergencies. Other student support services, ranging from expert library faculty and staff to health services to counseling, are also available to all students in the program.

**b**) Describe types, amounts and sources of student financial support anticipated. Indicate the proportion of the student body receiving each type of support, including those receiving no support.

Most master's students at Binghamton rely on loans for financial support, though several students also work in various offices on campus or in businesses in town. Because of the need to invest our limited graduate student support funds in doctoral students, who are hired as Teaching Assistants, Research Project Assistants, or Graduate Assistants, master's students receive loans (80%), campus positions (10%), or no support (10%). MPH students will have opportunities to serve as Research Assistants for faculty in various public health fields who receive external funding through the NIH and other agencies and foundations.

#### 2.6. Prior Learning Assessment

If this program will grant credit based on Prior Learning Assessment, describe the methods of evaluating the learning and the maximum number of credits allowed, **or check here** [X] **if not applicable**.

## 2.7. Program Assessment and Improvement

Describe how this program's achievement of its objectives will be assessed, in accordance with <u>SUNY policy</u>, including the date of the program's initial assessment and the length (in years) of the assessment cycle. Explain plans for assessing achievement of students learning outcomes during the program and success after completion of the program. **Append** at the end of this form, **a plan or curriculum map** showing the courses in which the program's educational and, if appropriate, career objectives – from Item 2.3(b) of this form – will be taught and assessed. **NOTE:** The University Faculty Senate's <u>Guide for the Evaluation of Undergraduate Programs</u> is a helpful reference.

As part of the regular assessment cycle for all programs at Binghamton University, student learning outcomes will be assessed at regular intervals by the faculty to determine how effectively graduates have attained the desired knowledge, skills, and competencies; feedback from the assessment process will be used to modify and improve courses, practicum and capstone experiences, and curriculum design.

Program achievements will be assessed as part of the application for accreditation by CEPH in the third year. The program will assess students' performance on the required CPH exam, which tests individual students' performance on core fields, on cross-cutting competencies, and on overall preparation. The program will collect and analyze data on

students' achievements of their career objectives by gathering and evaluating information about job placement and satisfaction. Exit surveys of all students will be conducted, and special assessment will be directed to understanding and continuously improving the experience of under-represented students in the program.

The assistant to the program director will assume responsibility for assessment of student learning and curricular effectiveness. Faculty will refine learning outcomes and develop a specific plan to assess learning outcomes, as well as content, organization, and effectiveness of the curriculum and the school's achievement of its mission and goals. Student self-assessments will supplement other data about students' development of the professional competencies and skills required for effective practice.

#### Section 3. Program Schedule and Curriculum

Complete the **SUNY Graduate Program Schedule** to show how a typical student may progress through the program. This is the registered curriculum, so please be precise. Enter required courses where applicable, and enter generic course types for electives or options. Either complete the blank Schedule that appears in this section, or complete an Excel equivalent that computes all sums for you, found <a href="here">here</a>. Rows for terms that are not required can be deleted.

**NOTES:** The **Graduate Schedule** must include all curriculum requirements and demonstrate that expectations from in Regulation 52.2 http://www.highered.nysed.gov/ocue/lrp/rules.htm are met.

#### Special Cases for the Program Schedules:

- For a program with multiple tracks, or with multiple schedule options (such as full-time and part-time options), use one Program Schedule for each track or schedule option. Note that licensure qualifying and non-licensure qualifying options cannot be tracks; they must be separate programs.
- When this form is used for a multi-award and/or multi-institution program that is <u>not</u> based entirely on existing programs, use the schedule to show how a sample student can complete the proposed program. **NOTE:** Form 3A, <u>Changes to an Existing Program</u>, should be used for new multi-award and/or multi-institution programs that are based entirely on existing programs. <u>SUNY policy</u> governs the awarding of two degrees at the same level.

a) If the program will be offered through a nontraditional schedule (i.e., not on a semester calendar), what is the schedule and how does it impact financial aid eligibility? *NOTE:* Consult with your campus financial aid administrator for information about nontraditional schedules and financial aid eligibility.

Not applicable; traditional schedule.

**b**) For each existing course that is part of the proposed graduate program, **append** a catalog description at the end of this document.

Not applicable; program relies on new courses.

c) For each new course in the graduate program, append a syllabus at the end of this document. NOTE: Syllabi for all courses should be available upon request. Each syllabus should show that all work for credit is graduate level and of the appropriate rigor. Syllabi generally include a course description, prerequisites and corequisites, the number of lecture and/or other contact hours per week, credits allocated (consistent with <u>SUNY policy on credit/contact hours</u>), general course requirements, and expected student learning outcomes.

See Appendix B.

**d)** If the program requires external instruction, such as clinical or field experience, agency placement, an internship, fieldwork, or cooperative education, **append** a completed <u>External Instruction</u> form at the end of this document

See Appendix C.

| Program/Track Title and Awa   | rd:Pub      | lic He  | alth MPH, global health foo           | cus   |            |                                  |                  |
|---|-------------|---------|---------------------------------------|---|------------|----------------------------------|------------------|
| a) Indicate academic calendar ty  | pe: [ X ] S | emeste  | r [ ] Quarter [ ] Trimester [         | Other (describe):                           |            |                                  |                  |
| b) Label each term in sequence,   | consistent  | with th | e institution's academic calenda      | r (e.g., Fall 1, Spring 1, Fall 2)          |            |                                  |                  |
| _ ·   |             |         |                                       | <b>m</b> ; copy/expand the table as needed. |            |                                  |                  |
| · ·   | -           | -       |                                       | ements. Complete all columns that app       | lv to a co | urse.                            |                  |
| Term 1: Fall 1  | <u> </u>    |         | , , , , , , , , , , , , , , , , , , , | Term 2: Spring 1                            | <u>-</u>   |                                  |                  |
| Course Number & Title   | Credits     | New     | Co/Prerequisites                      | Course Number & Title                       | Credits    | New                              | Co/Prerequisites |
| PH 510: Foundations of Public Health  | 2           | Х       | •                                     | PH 515: Biostatistics                       | 3          | Х                                | •                |
| PH 501 Experiential Public Health   | 1           | Х       |                                       | PH 517: Public Health Biology               | 2          | х                                |                  |
| PH 512: Social & Behavioral Sciences  | 2           |         |                                       | PH 522: Health Policy, Finance, &           | 3          | Х                                |                  |
| in Public Health  | 3           | X       |                                       | Management                                  |            |                                  |                  |
| PH 520: Epidemiology I: Basic   | 3           |         |                                       | PH 530: Global Health I: Research           | 3          | Х                                |                  |
| Principles  | 3           | X       |                                       | Concepts & Measurements                     |            |                                  |                  |
| PH 518: Environmental Health  | 3           | X       |                                       | PH 502: Experiential Public Health          | X          |                                  |                  |
|   |             |         |                                       |   |            |                                  |                  |
| Term credit total   | : 12        |         |                                       | Term credit total:                          | 12         |                                  |                  |
| Term 3: Fall 2  |             |         |                                       | Term 4: Spring 2                            |            |                                  |                  |
| Course Number & Title   | Credits     | New     | Co/Prerequisites                      | Course Number & Title                       | Credits    | New                              | Co/Prerequisites |
| PH 525: Epidemiology II, Applied  | 3           | X       | PH 512, 515, 518, 520, 522            | PH 538: Global Health III: Global           | 3          | X                                |                  |
| Epidemiology  |             |         |                                       | Strategies, Policies, & Implementation      |            |                                  |                  |
| PH 524: Program Planning &  | 2           | X       |                                       | PH 595: Practicum & Capstone                | 9          | X                                | PH 525           |
| Evaluation  |             |         |                                       |   |            |                                  |                  |
| PH 535: Global Health II:   | 3           | X       |                                       |   |            |                                  |                  |
| Determinants & Disparities  |             |         |                                       |   |            |                                  |                  |
| PH 550: Topics in Global Health   | 3           | X       |                                       |   |            |                                  |                  |
| PH 503: Experiential Public Health  | 1           | X       |                                       |   |            |                                  |                  |
| Term credit total   | : 12        |         |                                       | Term credit total:                          | 12         |                                  |                  |
| Total Credits: 48  Identify the required comprehensive, culminating element(s), such as a thesis or examination, in applicable: PH 595: Practicum & Capstone, emphasis on global health |             |         |                                       |   |            | , including course number(s), if |                  |

SUNY Graduate Program Schedule (OPTION: You can insert an Excel version of this schedule AFTER this line, and delete the rest of this page.)

**New**: X if new course **Prerequisite(s)**: list prerequisite(s) for the listed courses

## Program/Track Title and Award:\_\_Public Health MPH, population health focus

e) Indicate academic calendar type: [X] Semester [] Quarter [] Trimester [] Other (describe):

| Term 1: Fall 1  |                   |     |                            | Term 2: Spring 1  |         |         |                   |
|---|-------------------|-----|----------------------------|---|---------|---------|-------------------|
| Course Number & Title                                       | Credits           | New | Co/Prerequisites           | Course Number & Title   | Credits | New     | Co/Prerequisite   |
| PH 510: Foundations of Public Health                        | 2                 | X   | •                          | PH 515: Biostatistics   | 3       | х       | •                 |
| PH 501: Experiential Public Health                          | 1                 | X   |                            | PH 517: Public Health Biology   | 2       | х       |                   |
| PH 512: Social & Behavioral Sciences in Public Health       | 3                 | х   |                            | PH 522: Health Policy, Finance, & Management  | 3       | Х       |                   |
| PH 520: Epidemiology I: Basic<br>Principles                 | 3                 | х   |                            | PH 540: Population Health I: Research<br>Concepts & Measurements                            | 3       | Х       |                   |
| PH 518: Environmental Health                                | 3                 | X   |                            | PH 502: Experiential Public Health  | 1       | X       |                   |
| Term credit total:  | 12                |     |                            | Term credit total:  | 12      |         |                   |
| Term 3: Fall 2  |                   |     |                            | Term 4: Spring 2  |         |         |                   |
| Course Number & Title                                       | Credits           | New | Co/Prerequisites           | Course Number & Title   | Credits | New     | Co/Prerequisite   |
| PH 525: Epidemiology II, Applied                            | 3                 | X   | PH 512, 515, 518, 520, 522 | PH 548: Population Health III:  | 3       | X       |                   |
| Epidemiology  |                   |     |                            | Population Strategies, Policies, & Implementation   |         |         |                   |
| PH 524: Program Planning & Evaluation                       | 2                 | Х   |                            | PH 597: Practicum & Capstone  | 9       | Х       | PH 525            |
| PH 545: Population Health II:<br>Determinants & Disparities | 3                 | X   |                            |   |         |         |                   |
| PH 550: Topics in Population Health                         | 3                 | X   |                            |   |         |         |                   |
| PH 503: Experiential Public Health                          | 1                 | X   |                            |   |         |         |                   |
| Term credit total:  | 12                |     |                            | Term credit total:  | 12      |         |                   |
|   | tal<br>redits: 48 |     |                            | nsive, culminating element(s), such as a these<br>& Capstone, emphasis on population healtl |         | ination | , including cours |

**New**: X if new course **Prerequisite(s)**: list prerequisite(s) for the listed courses

#### Section 4. Faculty

- a) Complete the SUNY Faculty Table on the next page to describe current faculty and to-be-hired (TBH) faculty.
- **b) Append** at the end of this document position descriptions or announcements for each to-be-hired faculty member.

The university intends to hire a program director, at the rank of associate or full professor with tenure, during the 2016-17 year. See Appendix D for the position description.

**NOTE:** CVs for all faculty should be available upon request. Faculty CVs should include rank and employment status, educational and employment background, professional affiliations and activities, important awards and recognition, publications (noting refereed journal articles), and brief descriptions of research and other externally funded projects. New York State's requirements for faculty qualifications are in Regulation 52.2 <a href="http://www.highered.nysed.gov/ocue/lrp/rules.htm">http://www.highered.nysed.gov/ocue/lrp/rules.htm</a>

c) What is the institution's definition of "full-time" faculty?

Faculty are full time when they have full-time commitments to a department, division, or school. Their full-time obligations in teaching, research, and service are defined by the dean and chair of the unit in which they are employed.

## **SUNY Faculty Table**

Provide information on current and prospective faculty members (identifying those at off-campus locations) who will be expected to teach any course in the graduate program. Expand the table as needed. Use a separate Faculty Table for each institution if the program is a multi-institution program.

| (a)   | (b)  | (c)   | (d)   | (e)   | (f)  |
|---|--|---|---|---|--|
| Faculty Member Name and Title/Rank (Include and identify Program Director with an asterisk) | % of Time<br>Dedicated<br>to This<br>Program | Program Courses Which May Be Taught (Number and Title)  | Highest and Other<br>Applicable Earned<br>Degrees (include<br>College or<br>University) | Discipline(s) of<br>Highest and Other<br>Applicable Earned<br>Degrees | Additional Qualifications: List<br>related certifications, licenses and<br>professional experience in field              |
| PART 1. Full-Time Faculty   | 1000   | DVV 710 710   | DI D 77   |   |  |
| Yvonne Johnston   | 100%   | PH 510, 512,<br>515, 517, 520,<br>524, 525; 540,<br>545, 548,<br>electives in<br>population<br>health, 597; PH<br>501, 502, 503 | PhD University at<br>Albany (SUNY)  | Epidemiology  | MPH, University at Albany; MS Family Nursing, Binghamton; RPN; Nurse Practitioner  |
| Titilayo Okoror   | 100%   | PH 510, 524;<br>530, 535, 538,<br>electives in<br>global health,<br>595; PH 501,<br>502, 503                                    | PhD Pennsylvania<br>State University  | Biobehavioral<br>Health   | HIV/AIDS Certified Counselor,<br>Pennsylvania State Department of<br>Health  |
| Katherine Wander  | 25%  | PH 520, 525,<br>535, 540, 548;<br>electives on<br>case studies in<br>global health,<br>infectious<br>disease, 595               | PhD University of<br>Washington   | Biological<br>Anthropology  | MPH University of Washington   |
| Gary D. James   | 10%  | PH 517, 520,<br>540; electives in<br>stress &<br>hypertension   | PhD Pennsylvania<br>State University  | Biological<br>Anthropology<br>(Human Biology)                         | Director, Institute for Primary & Preventative Health Care;  |
| Ralph Garruto   | 10%  | PH 518;<br>electives in<br>environmental<br>health  | PhD Pennsylvania<br>State University  | Human Population<br>Biology   | Research Professor, Biomedical<br>Anthropology & Neurosciences;<br>adjunct professor, SUNY Upstate<br>Medical University |
| Leo Wilton  | 50%  | PH 512, 520,<br>524, 525, 530,<br>545, 548;<br>electives on   | PhD New York<br>University  | Counseling<br>Psychology  | MPH global focus University of<br>Massachusetts Amherst  |

| (a)  | (b)  | (c)  | (d)   | (e)   | <b>(f)</b>  |
|--|--|--|---|---|---|
| Faculty Member Name and<br>Title/Rank<br>(Include and identify Program<br>Director with an asterisk) | % of Time<br>Dedicated<br>to This<br>Program | Program Courses Which May Be Taught (Number and Title) health & human  | Highest and Other<br>Applicable Earned<br>Degrees (include<br>College or<br>University) | Discipline(s) of<br>Highest and Other<br>Applicable Earned<br>Degrees | Additional Qualifications: List related certifications, licenses and professional experience in field |
|  |  | rights; black<br>community &<br>politics of<br>health; issues in<br>HIV/AIDS<br>prevention, 595                          |   |   |   |
| Serdar Atav  | 25%  | PH 522, 524,<br>538, electives<br>on policy,<br>statistical<br>analysis  | PhD Binghamton<br>University  | Political Science   | Professor of Nursing  |
| Victoria Rizzo   | 25%  | PH 512, 522,<br>545, electives<br>on health policy   | PhD University at<br>Albany   | Social Welfare  | Licensed Clinical Social Worker,<br>Social Work in Health Care practice<br>experience                 |
| Sanjeena Dang  | 25%  | PH 515;<br>electives on<br>analysis of<br>biological data,<br>bioinformatics,<br>use of SAS for<br>data analysis,<br>597 | PhD University of<br>Guelph   | Statistics  |   |
| Louisa Holmes  | 25%  | PH 518;<br>electives on<br>environmental<br>health   | PhD University of<br>Southern California  | Geography   | Postdoc UCSF, Center for Tobacco<br>Control Research & Education                                      |
| Ganggang Xu  | 10%  | PH 515,<br>elective on<br>research design,<br>597  | PhD Texas A & M   | Statistics  |   |
| Xingye Qiao  | 10%  | PH 515,<br>electives on<br>data analysis &<br>experimental<br>design   | PhD North Carolina,<br>Chapel Hill  | Statistics  |   |
| Suk-Young Kang   | 10%  | PH 512,<br>Electives on<br>immigrant and   | PhD Columbia<br>University  | Social Gerontology,<br>Social Work                                    | Mental health & social work<br>gerontology in relation to Asian<br>immigrants                         |

| (a)   | (b)  | (c)  | (d)   | (e)   | <b>(f</b> )  |
|---|--|--|---|---|--|
| Faculty Member Name and<br>Title/Rank<br>(Include and identify Program<br>Director with an asterisk)    | % of Time<br>Dedicated<br>to This<br>Program | Program Courses Which May Be Taught (Number and Title) refugee health,   | Highest and Other<br>Applicable Earned<br>Degrees (include<br>College or<br>University) | Discipline(s) of<br>Highest and Other<br>Applicable Earned<br>Degrees | Additional Qualifications: List related certifications, licenses and professional experience in field          |
| Manas Chatterji   | 10%  | 595<br>PH 522  | PhD Wharton School,<br>University of<br>Pennsylvania                                    | International<br>Management   | Organizer, annual symposium on "Health Care Policy & Management"   |
| David A Merriwether   | 10%  | Electives on public health genetics  | PhD University of<br>Pittsburgh   | Anthropology  | Molecular evolution, population genetics, mitochondrial disease & health                                       |
| Part 2. Part-Time Faculty   |  |  |   |   |  |
| Dr. Christopher Ryan  | 10%  | PH 510, 515,<br>520, 525, 540;<br>electives on<br>data<br>management,<br>specialized<br>epidemiology,<br>communicable<br>disease | MD Medicine, SUNY<br>Upstate Medical<br>University                                      | Family Medicine   | Medical Director, Broome County<br>Health Dept; Population-Based<br>Medicine Program Director, SUNY<br>Upstate |
| Emily Pape  | 25%  | PH 522, 540,<br>545, 548;<br>electives in<br>population<br>health<br>initiatives   | PhD University of<br>Michigan   | Health Services,<br>Organization, and<br>Policy                       | Experience as Project Manager, Population & Behavioral Health, Care Compass Network                            |
| Deborah Schechter   | 25%  | PH 517   | PhD University of<br>Washington Seattle   | Biocultural<br>Anthropology   | Human behavioral ecology and Native<br>American health   |
| Steven Clarke   | 10%  | PH 512, 524, 540, 548  | PhD Virginia Tech   | Applied<br>Experimental<br>Psychology                                 | Director, Health Promotion &<br>Prevention Services, Binghamton  |
|   |  |  |   |   |  |
|   |  |  |   |   |  |
| Part 3. Faculty To-Be-Hired (List as TBH1, TBH2, etc., and provide title/rank and expected hiring date) |  |  |   |   |  |
| TBH1 Program Director,* Associate or  | 100%   | TBD: all of  | PhD required  | TBD   |  |

| (a)                              | (b)       | (c)               | (d)                 | (e)               | (f)                                  |
|----------------------------------|-----------|-------------------|---------------------|-------------------|--------------------------------------|
|                                  |           | Program           |                     |                   |                                      |
|                                  |           | Courses Which     | Highest and Other   |                   |                                      |
| Faculty Member Name and          | % of Time | May Be            | Applicable Earned   | Discipline(s) of  |                                      |
| Title/Rank                       | Dedicated | Taught            | Degrees (include    | Highest and Other | Additional Qualifications: List      |
| (Include and identify Program    | to This   | (Number and       | College or          | Applicable Earned | related certifications, licenses and |
| Director with an asterisk)       | Program   | Title)            | <b>University</b> ) | Degrees           | professional experience in field     |
| Full Professor, begins fall 2017 |           | core and at least |                     |                   |                                      |
|                                  |           | one focus         |                     |                   |                                      |
|                                  |           | course            |                     |                   |                                      |
|                                  |           |                   |                     |                   |                                      |
|                                  |           |                   |                     |                   |                                      |
|                                  |           |                   |                     |                   |                                      |
|                                  |           |                   |                     |                   |                                      |
|                                  |           |                   |                     |                   |                                      |

#### Section 5. Financial Resources and Instructional Facilities

a) What is the resource plan for ensuring the success of the proposed program over time? Summarize the instructional facilities and equipment committed to ensure the success of the program. Please explain new and/or reallocated resources over the first five years for operations, including faculty and other personnel, the library, equipment, laboratories, and supplies. Also include resources for capital projects and other expenses.

The proposed MPH program draws on a transdisciplinary group of faculty currently working from different programs, departments and schools on parallel and intersecting projects in the field of public health. As a result, the new costs of the MPH are small and will be offset by tuition. One new faculty member will be hired in 2016-17 to serve as program director. Because Health Sciences is one of the five core (TAE) areas of research on the Binghamton University campus, additional hiring in the field can be expected; the program director will have opportunities to hire more faculty as the program grows. A few supporting faculty and adjuncts will be hired, as is clearly desirable, from the Broome County Public Health Department and other local public health agencies.

Instructional facilities are currently available on campus, including in the recently renovated Student Wing building, with state of the art equipment, "writable" walls, movable desks and chairs, and an ideal flexibility for student learning. Seven computer labs are available on campus, including three in the libraries, with software appropriate for internet searching and word processing. Statistical software is made available to students in appropriate programs through "virtual client" identification that enables them to download and use a variety of programs on campus or at home. Study space is available to students in any of the three libraries on campus.

Space for the program director, faculty, support staff, and meetings will be freed in time for a fall 2017 start by several anticipated moves on campus. A new building is projected to open in the Innovative Technologies Complex; decommissioned residence halls are being renovated for academic use; several offices and whole departments are slated to move over the summer. In the first year, the program is likely to be located in a small suite of offices in the Hinman College academic area, but as the program grows additional space will be available.

b) Complete the five-year SUNY Program Expenses Table, below, consistent with the resource plan summary. Enter the anticipated <u>academic years</u> in the top row of this table. List all resources that will be engaged specifically as a result of the proposed program (e.g., a new faculty position or additional library resources). If they represent a continuing cost, new resources for a given year should be included in the subsequent year(s), with adjustments for inflation or negotiated compensation. Include explanatory notes as needed.

#### **SUNY Program Expenses Table**

(OPTION: You can paste an Excel version of this schedule AFTER this sentence, and delete the table below.)

|                              |            |             | Enrollme  | ent/Revenue  |           |              |              |
|------------------------------|------------|-------------|-----------|--------------|-----------|--------------|--------------|
|                              | Year -1    | Year 1      | Year 2    | Year 3       | Year 4    | Year 5       | Steady State |
| Enrollment Full Time         | 0          | 23          | 47        | 47           | 47        | 47           | 47           |
| Enrollment Part Time         | 0          | 2           | 3         | 3            | 3         | 3            | 3            |
| Revenue Full Time/year       | \$0        | \$297,183   | \$607,287 | \$607,287    | \$607,287 | \$607,287    | \$607,287    |
| Revenue Part Time/year       | \$0        | \$6,805     | \$10,208  | \$10,208     | \$10,208  | \$10,208     | \$10,208     |
| Total Revenue/year           | \$0        | \$303,988   | \$617,495 | \$617,495    | \$617,495 | \$617,495    | \$617,495    |
|                              |            |             | Expe      | nditures     |           |              |              |
| OTPS                         |            |             | •         |              | •         |              |              |
| Library                      | \$10,000   | \$4,500     | \$4,500   | \$4,500      | \$4,500   | \$4,500      | \$4,500      |
| Equipment                    | \$15,000   | \$3,000     | \$3,000   | \$3,000      | \$15,000  | \$3,000      | \$3,000      |
| Laboratories                 | \$0        | \$0         | \$0       | \$0          | \$0       | \$0          | \$0          |
| Supplies/OTPS                | \$5,000    | \$5,000     | \$5,000   | \$5,000      | \$5,000   | \$5,000      | \$5,000      |
| Capital Expenses             | \$0        | \$0         | \$0       | \$0          | \$0       | \$0          | \$0          |
| Other                        | \$0        | \$0         | \$0       | \$0          | \$0       | \$0          | \$0          |
| Faculty/Staff                | 1          | T           | T         | T            | T         | T            | 1            |
| Secretary                    | \$40,000   | \$40,800    | \$41,616  | \$42,448     | \$43,297  | \$44,163     | \$45,046     |
| Associate Director           | \$55,000   | \$56,100    | \$57,222  | \$58,366.44  | \$59,534  | \$60,724.44  | \$61,939     |
| Faculty Director             | \$100,000  | \$102,000   | \$104,040 | \$106,120.80 | \$108,243 | \$110,408.08 | \$112,616    |
| Faculty buyout               | \$85,000   | \$86,700.00 | \$88,434  | \$90,202.68  | \$92,007  | \$93,846.87  | \$95,724     |
| Faculty buyout               | \$86,588   | \$88,319.76 | \$90,086  | \$91,887.88  | \$93,726  | \$95,600.15  | \$97,512     |
| Faculty Buyout               | \$25,732   | \$26,246.64 | \$26,772  | \$27,307.00  | \$27,853  | \$28,410.21  | \$28,978     |
| Faculty Buyout               | \$24,038   | \$24,518.76 | \$25,009  | \$25,509.32  | \$26,020  | \$26,539.89  | \$27,071     |
| Faculty Buyout               | \$15,910   | \$16,228.20 | \$16,553  | \$16,883.82  | \$17,221  | \$17,565.93  | \$17,917     |
| Faculty PT                   | \$35,000   | \$35,700    | \$36,414  | \$37,142.28  | \$37,885  | \$38,642.83  | \$39,416     |
| Faculty PT                   | \$10,000   | \$10,200    | \$10,404  | \$10,612.08  | \$10,824  | \$11,040.81  | \$11,262     |
| Adjuncts and Buyouts         | \$40,000   | \$40,800    | \$41,616  | \$42,448.32  | \$43,297  | \$44,163.23  | \$45,046     |
| Total PSR/PST                | \$547,268  | \$540,113   | \$550,666 | \$561,429    | \$584,408 | \$583,606    | \$595,028    |
| Gain/Loss                    | -\$547,268 | -\$236,125  | \$66,829  | \$56,066     | \$33,087  | \$33,889     | \$22,467     |
| NYS Tuition Full Time        | \$12,921   |             |           |              |           |              |              |
| <b>NYS Tuition Part Time</b> | \$3,403    |             |           |              |           |              |              |

## Section 6. Library Resources

a) Summarize the analysis of library collection resources and needs *for this program* by the collection librarian and program faculty. Include an assessment of existing library resources and accessibility to those resources for students enrolled in the program in all formats, including the institution's implementation of SUNY Connect, the SUNY-wide electronic library program.

The library is currently expanding holdings in health sciences, and the projected budget for the MPH provides additional resources to increase public health materials and subscriptions in the near term. The collections serve` the faculty who will teach core courses in the MPH program, because they currently serve biomedical anthropology, nursing, social work, Africana Studies, and other existing programs where public health research is underway and ongoing. As planned new programs in nursing and pharmacy come online, the expanded needs in all health science fields will be met with targeted resources, and the MPH needs will in many cases overlap with those as well as global area studies needs.

b) Describe the institution's response to identified collection needs and its plan for library development.

See above.

#### **Section 7. External Evaluation**

SUNY and SED require external evaluation of all proposed graduate degree programs. List below all SUNY-approved evaluators who conducted evaluations (adding rows as needed), and **append at the end of this document** each original, signed <u>External Evaluation Report</u>. **NOTE:** To select external evaluators, a campus sends 3-5 proposed evaluators' names, titles and CVs to the assigned SUNY Program Reviewer, expresses its preferences and requests approval.

| Evaluator #1                                 | Evaluator #2                                     |
|--|--|
| Name: Dr. Rosemary Caron                     | Name: Dr. Resa Jones                             |
| Title: Professor, Health Management & Policy | Title: Associate Professor, Director of Graduate |
| Institution: University of New Hampshire     | Programs   |
|  | Institution: Virginia Commonwealth University    |

#### **Section 8. Institutional Response to External Evaluator Reports**

**Append at the end of this document** a single *Institutional Response* to all *External Evaluation Reports*.

#### Section 9. SUNY Undergraduate Transfer

**NOTE:** SUNY Undergraduate Transfer policy does not apply to graduate programs.

#### Section 10. Application for Distance Education

- a) Does the program's design enable students to complete 50% or more of the course requirements through distance education? [X] No [] Yes. If yes, append a completed *SUNY Distance Education Format Proposal* at the end of this proposal to apply for the program to be registered for the distance education format.
- b) Does the program's design enable students to complete 100% of the course requirements through distance education? [X] No [] Yes

#### Section MPA-1. Need for Master Plan Amendment and/or Degree Authorization

- a) Based on guidance on <u>Master Plan Amendments</u>, please indicate if this proposal requires a Master Plan Amendment.
  - [X] No [] Yes, a completed <u>Master Plan Amendment Form</u> is **appended** at the end of this proposal.

**b**) Based on *SUNY Guidance on Degree Authorizations* (below), please indicate if this proposal requires degree authorization.

[ ] No [ X ] Yes, once the program is approved by the SUNY Provost, the campus will work with its Campus Reviewer to draft a resolution that the SUNY Chancellor will recommend to the SUNY Board of Trustees.

**SUNY Guidance on Degree Authorization.** Degree authorization is required when a proposed program will lead to a <u>new degree</u> (e.g., B.F.A., M.P.H.) at an existing level of study (i.e., associate, baccalaureate, first-professional, master's, and doctoral) in an existing disciplinary area at an institution. Disciplinary areas are defined by the <u>New York State Taxonomy of Academic Programs</u>. Degree authorization requires approval by the SUNY Provost, the SUNY Board of Trustees and the Board of Regents.

## **List of Appended Items**

**Appended Items:** Materials required in selected items in Sections 1 through 10 and MPA-1 of this form should be appended after this page, with continued pagination. In the first column of the chart below, please number the appended items, and append them in number order.

| Number | Appended Items   | Reference Items            |
|--------|--|----------------------------|
|        | For multi-institution programs, a letter of approval from partner institution(s)   | Section 1, Item (e)        |
|        | For programs leading to professional licensure, a side-by-side chart showing how the program's components meet the requirements of specialized accreditation, <a href="Commissioner's Regulations for the Profession">Commissioner's Regulations for the Profession</a> , or other applicable external standards | Section 2.3, Item (e)      |
|        | For programs leading to licensure in selected professions for which<br>the SED Office of Professions (OP) requires a specialized form, a<br>completed version of that form   | Section 2.3, Item (e)      |
| A      | OPTIONAL: For programs leading directly to employment, letters of support from employers, if available   | Section 2, Item 2.3 (h)(2) |
| В      | For all programs, a plan or curriculum map showing the courses in which the program's educational and (if appropriate) career objectives will be taught and assessed   | Section 2, Item 7          |
|        | For all programs, a catalog description for each existing course that is part of the proposed graduate major program   | Section 3, Item (b)        |
| С      | For all programs with new courses, syllabi for all new courses in a proposed graduate program  | Section 3, Item (c)        |
| D      | For programs requiring external instruction, a completed <u>External</u> <u>Instruction Form</u> and documentation required on that form   | Section 3, Item (d)        |
| Е      | For programs that will depend on new faculty, position descriptions or announcements for faculty to-be-hired   | Section 4, Item (b)        |
| F      | For all programs, original, signed External Evaluation Reports from SUNY-approved evaluators   | Section 7                  |
| G      | For all programs, a single Institutional Response to External Evaluators' Reports  | Section 8                  |
|        | For programs designed to enable students to complete at least 50% of the course requirements at a distance, a <u>Distance Education Format Proposal</u>  | Section 10                 |
|        | For programs requiring an MPA, a Master Plan Amendment form  | Section MPA-1              |
| Н      | Student survey of interest in an MPH program   |                            |

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## APPENDIX A



September 19, 2016

Alexander N. Cartwright Provost and Executive Vice Chancellor State University of New York System Administration State University Plaza Albany, NY 12246

#### Dear Provost Cartwright:

I am writing this letter in support of Binghamton University's proposal to establish a program in public health leading to a Master's of Public Health (MPH) degree. This program will prepare students to contribute in multiple ways to improving public health in New York and elsewhere. It will offer concentrations in global health and in population health, and I believe that it can be of significant value to the communities where these graduates choose to begin and spend their careers.

This unique program is in the process of SUNY and New York State Education Department approval. While the timing of the approval process makes it difficult to set a specific number of placement possibilities, we support the program and the value it will provide. When the program begins, we plan to do our best to place at least one advanced student per year during fall, spring, and summer semesters.

We wish the university success with the program.

Sincerely,

Jamie M. Kelly, Director

Broome County Office for Aging

Jamie M. Kelly

Broome County Office Building . 60 Hawley Street . P.O. Box 1766 . Binghamton, New York 13902 **Phone: (607) 778-2411** . Fax: (607) 778-2316 . www.gobroomecounty.com

# United Way of Broome County, Inc.



September 30, 2016

Alexander N. Cartwright Provost and Executive Vice Chancellor State University of New York System Administration State University Plaza Albany, NY 12246

#### Dear Provost Cartwright:

I just wanted to take a moment to write a letter of support for Binghamton University's proposal to establish a program in public health leading to a Master's of Public Health (MPH) degree. This important program will prepare students to contribute in multiple ways to improving public health in New York and beyond. It will offer concentrations in global health and in population health, and we believe that it will be of significant value to our community and the mission of United Way.

This unique program is in the process of SUNY and New York State Education Department approval. While the timing of the approval process makes a specific number of placements at the United Way difficult to set at this point, we support the program and recognize its value. Under favorable conditions when the program begins, we hope to be able to place up to three advanced students per year during fall, spring, and summer semesters.

We wish the university success with the program and look forward to continuing our good working relationships with BU.

Best regards,

Robin Alpaugh

Executive Director, United Way of Broome County MA, Political Science, Binghamton University, 1996 BA, Political Science, Binghamton University, 1990



# **Schuyler County Public Health**

106 South Perry Street Watkins Glen, NY 14891 Phone: 607-535-8140 Fax: 607-535-8157 www.schuylercounty.us/publichealth scph@co.schuyler.ny.us



Marcia Kasprzyk, RN - Public Health Director

September 22, 2016

Alexander N. Cartwright
Provost and Executive Vice Chancellor
State University of New York
System Administration
State University Plaza
Albany, NY 12246

#### Dear Provost Cartwright:

I write in support of Binghamton University's proposal to establish a program in public health leading to a Master's of Public Health (MPH) degree. This important program will prepare students to contribute in multiple ways to improving public health in New York and beyond. It will offer concentrations in global health and in population health, and we believe that it will be of significant value.

This unique program is in the process of SUNY and New York State Education Department approval. While the timing of the approval process makes a specific number of placements in our organization hard to set at this point, we support the program and recognize its value. Under favorable conditions when the program begins, we hope to be able to place one advanced student each fall, spring, and summer semesters annually.

We wish the university success with the program and look forward to working with you to increase capacity of Public Health Professionals for the future in the Southern Tier.

Sincerely

Marcia Kasprzyk

Schuyler County Public Health Director



P.O. Box 416 Whitney Point NY 13862

www.rhnscny.org

(607) 692 - 7669 Fax (607) 692 - 7670 (888) 603 - 5973

Serving Rural Broome, Delaware and Tioga counties

September 19, 2016

Alexander N. Cartwright
Provost and Executive Vice Chancellor
State University of New York
System Administration
State University Plaza
Albany, NY 12246

#### Dear Provost Cartwright:

I write in support of Binghamton University's proposal to establish a program in public health leading to a Master's of Public Health (MPH) degree. This important program will prepare students to contribute in multiple ways to improving public health in New York and beyond. It will offer concentrations in global health and in population health, and we believe that it will be of significant value.

This unique program is in the process of SUNY and New York State Education Department approval. While the timing of the approval process makes a specific number of placements in our organization hard to set at this point, we support the program and recognize its value. Under favorable conditions when the program begins, we hope to be able to place up to three advanced students per year during fall, spring, and summer semesters.

We wish the university success with the program.

Sincerely,

John C. (Jack) Salo Executive Director

JS/dl



Of South Central New York. 457 State Street Binghamton, NY 13901

Phone: 607-772-0517 / 800-231-0744

Fax: 607-772-0468

September 19, 2016

Alexander N. Cartwright Provost and Executive Vice Chancellor State University of New York System Administration State University Plaza Albany, NY 12246

Dear Provost Cartwright:

As the Director of a regional non-profit community-based organization balanced between public health and clinical care, I am excited to support Binghamton University's proposal to establish a program in public health leading to a Master's of Public Health (MPH) degree.

It is my understanding that this program is in the process of SUNY and New York State Education Department approval. This important program will prepare students to contribute in multiple ways to improving public health in New York and beyond.

With over 25 years of providing services throughout our eight county region, Mothers & Babies has worked closely with many departments at Binghamton University – providing education to students through guest lectures, retaining educators and researchers to help assess and evaluate our programs, and providing educational and work experience opportunities to undergrad and graduate students through internships at our agency. Given our primary focus in public health, our agency would welcome the opportunity to provide internship opportunities to students in the public health program. It is likely we would be able to accept at least 2 each semester.

With the variety of other programs at Binghamton University, the addition of a Public Health Master's program is a perfect complement and in many ways, a needed one for BU and our community. I look forward to learning of the approval for this program and its start-up.

Sincerely,

Sharon Chesna

**Executive Director** 

Sharon Chasna



Robert E. Page Public Health Director Director

## **CHEMUNG COUNTY**

**Department of Health** 

103 Washington Street
P.O. BOX 588
Elmira, New York 14902-0588
(607) 737-2028 FAX (607) 737-2016



Harry C. Shepard III Deputy Public Health

Registrar of Vital Records

September 26, 2016

Alexander N. Cartwright
Provost and Executive Vice Chancellor
State University of New York
System Administration
State University Plaza
Albany, NY 12246

#### Dear Provost Cartwright:

I am writing this letter in support of Binghamton University's proposal to establish a program in public health leading to a Master's of Public Health (MPH) degree. This important program will prepare students to contribute in multiple ways to improving public health in New York state and the nation. It will offer concentrations in global health and in population health that we believe will be of significant value.

This unique program is in the process of SUNY and New York State Education Department approval. While the timing of the approval process makes a specific number of placements from our organization hard to set at this point, we support the program and recognize its value. Under favorable conditions when the program begins, we hope to be able to place some advanced students from this community each year during fall, spring, and summer semesters.

We wish the university success with the program.

Sincerely,

Robert E. Page U



Empowering Communities. Changing Lives.

September 19, 2016

Alexander N. Cartwright Provost and Executive Vice Chancellor State University of New York System Administration State University Plaza Albany, NY 12246

Dear Provost Cartwright:

I write in support of Binghamton University's proposal to establish a program in public health leading to a Master's of Public Health (MPH) degree. This important program will prepare students to contribute in multiple ways to improving public health in New York and beyond. It will offer concentrations in global health and in population health, and we believe that it will be of significant value.

This unique program is in the process of SUNY and New York State Education Department approval. While the timing of the approval process makes a specific number of placements in our organization hard to set at this point, we support the program and recognize its value. Under favorable conditions when the program begins, we hope to be able to place up to 3-5 advanced students per year during fall, spring, and summer semesters.

We wish the university success with the program.

Sincerely,

Jennifer Lesko President/CEO

Broome County Urban League

Empowering Communities and Changing Lives.

**43-45 Carroll Street, Binghamton, New York 13901**Phone: (607) 723-7303 • Fax: (607) 723-5827

www.bcul.org





## Broome County Health Department

Debra A. Preston, County Executive . Sean J. Britton, NRP, CPH, Director of Public Health

September 14, 2016

Alexander N. Cartwright Provost and Executive Vice Chancellor State University of New York System Administration State University Plaza Albany, NY 12246

### Dear Provost Cartwright:

I write in support of Binghamton University's proposal to establish a program in public health leading to a Master's of Public Health (MPH) degree. This important program will prepare students to contribute in multiple ways to improving public health in New York and beyond. It will offer concentrations in global health and in population health, and we believe that it will be of significant value.

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We wish the university success with the program!

Sincerely,

Sean J. Britton, NRP, CPH

225 Front Street . Binghamton, New York 13905 Phone: (607) 778-3930 . Fax: (607) 778-2838 . www.gobroomecounty.com October 4, 2016

Alexander N. Cartwright Provost and Executive Vice Chancellor State University of New York System Administration State University Plaza Albany, NY 12246

Dear Provost Cartwright:

I write in support of Binghamton University's proposal to establish a program in public health leading to a Master's of Public Health (MPH) degree. This important program will prepare students to contribute in multiple ways to improving public health in New York and beyond. It will offer concentrations in global health and in population health, and we believe that it will be of significant value to the local community, to the state of New York, and to the larger world.

We wish the university success with the program.

Sincerely,

Arthur R. Johnson, LCSW, Commissioner Broome County Department of Social Services

ARJ/mcm

36-42 Main Street. Binghamton, New York 13905

Phone: (607) 778-2600 . Fax (607) 778-3754. Website: www.gobroomecounty.com

### APPENDIX B

|    |  |                       |                     |               |                 |                    | *                |                    |                  |               |                     |                     |                      |                    | Г               |                  |                   |                   |                    |                    |
|----|--|-----------------------|---------------------|---------------|-----------------|--------------------|------------------|--------------------|------------------|---------------|---------------------|---------------------|----------------------|--------------------|-----------------|------------------|-------------------|-------------------|--------------------|--------------------|
| LE | RRICULUM MAP: END OF PROGRAM<br>ARNING OBJECTIVES and<br>MPETENCIES  | PH 510<br>Foundations | PH 512<br>Soc/Behav | PH 518<br>Env | PH 520<br>Epi I | PH 515<br>Biostats | PH 525<br>Epi II | PH 530<br>Global I | PH 517<br>Bio    | PH 522<br>HPM | PH 524<br>Prog Eval | PH 535<br>Global II | PH 538<br>Global III | PH 595<br>Glob Cap | PH 540<br>Pop I | PH 545<br>Pop II | PH 548<br>Pop III | PH 597<br>Pop Cap | PH 550<br>Elective | PH 552<br>Elective |
| 1. | Scientific Foundations for Public Health Practice: Employ a broad mastery of the five core areas of public health including application of empirical methods and practice approaches to promote and protect the health of individuals, communities, and populations.   | 1-7                   | 1-4                 | 1-3, 6        | 1-4             | 1-6                | 1-6              | 2, 4,<br>5, 7      | 1-8              | 2, 3          | 1-5                 | 2, 3,<br>4, 7, 8    | 4, 5, 9              | 1-7                | 1-7             | 2, 3,<br>5, 8    | 1, 3, 7           | 1, 3              |                    |                    |
| 2. | Health Promotion and Disease Prevention: Use relevant strategies and appropriate methods to identify current and emerging public health challenges, analyze determinants of health and disease, and plan, implement and evaluate evidence-based public health programs and policies that promote health and prevent disease across the lifespan.                               | 1-7                   | 5                   | 3-5           | 2-5             | 6, 7               | 7                | 2, 4, 5            | 1-8              | 2, 3,<br>4, 5 | 5, 6, 7             | 2, 3,<br>4, 8       | 2, 3, 4              | 1-6                | 3, 5,<br>6, 7   | 2, 3,<br>4, 7, 8 | 3, 7              | 3, 4, 7           |                    |                    |
| 3. | Scholarship & Research for Evidence-<br>Based Public Health Practice: Conduct<br>scholarly activities and scientifically rigorous<br>research designed to solve public health<br>problems, address health inequities,<br>eliminate health disparities, and improve the<br>health and well-being of individuals,<br>communities, and populations.                               | 7                     | 5                   | 5-6           | 3, 4, 7         | 6                  | 7                | 4, 5, 6            | 7.               | 2, 3,<br>5, 6 | 6, 7                | 3, 4, 8             | 4, 5, 9              | 1-5                | 2, 3,<br>4, 5   | 4, 5,<br>6, 7    | 2, 4,<br>5, 6     | 2,7               |                    | 8                  |
| 4. | Global Perspectives - Community Engagement & Cultural Context: Engage respectfully and effectively with diverse communities to promote the health of all members, appreciating the multi-layered cultural contexts of public health issues that shape health inequities, especially for individuals from marginalized, disadvantaged, underserved, and vulnerable populations. | 1, 2, 7               | 1-5                 | 5             | 5, 6            | 5, 6               | 5, 6, 7          | 5, 6, 7            | 3, 4,<br>5, 7, 8 | 1-6           | 5, 6                | 1-8                 | 1-9                  | 1-7                | 1, 3, 6         | 1-5              | 1, 3,<br>6, 7     | 3, 4,<br>5, 6, 7  | 2                  | P                  |
| 5. | Information & Health Technologies for<br>Public Health: Leverage information and<br>health technologies to achieve improvements<br>in public health systems, infrastructure, and<br>services including systems designed for<br>surveillance of public health threats and<br>monitoring of health outcomes.   | 7                     | 2                   | 4, 5          | 3, 4            | 5, 6               | 3-6              | 5 **               | 2-7              | 2, 3, 5       | 6                   | 3, 4, 8             | 4, 8, 9              | 1, 3, 4            | 4, 5,<br>6, 7   | 3, 7, 8          | 2                 | 2, 3, 7           |                    | e <sup>r</sup>     |
| 6. | Inter-professional Collaboration for<br>Improving Health Outcomes: Collaborate<br>with professionals from across disciplines<br>working interdependently as a constructive<br>public health team member fostering<br>organizational and community partnerships<br>to achieve improvements in health outcomes<br>for individuals, communities, and populations.                 | 7                     | 5                   | 5             | 6               | 6, 7               | 7                | 5                  | 7                | 3, 4, 5       | 6                   | 4, 5, 6             | 5, 6,<br>7, 8, 9     | 1-7                | 6, 7            | 3, 4, 8          | 3, 7              | 3, 5,<br>6, 7     |                    |                    |

| LE/ | RRICULUM MAP: END OF PROGRAM<br>RNING OBJECTIVES and<br>MPETENCIES   | PH 510<br>Foundations | PH 512<br>Soc/Behav | PH 518<br>Env | PH 520<br>Epi I | PH 515<br>Biostats | PH 525<br>Epi II | PH 530<br>Global I | PH 517<br>Bio | PH 522<br>HPM    | PH 524<br>Prog Eval | PH 535<br>Global II | PH 538<br>Global III | PH 595<br>Glob Cap | PH 540<br>Pop I | PH 545<br>Pop II | PH 548<br>Pop III | РН 597<br>Рор Сар | PH 550<br>Elective | PH 552<br>Elective |
|-----|--|-----------------------|---------------------|---------------|-----------------|--------------------|------------------|--------------------|---------------|------------------|---------------------|---------------------|----------------------|--------------------|-----------------|------------------|-------------------|-------------------|--------------------|--------------------|
| 7.  | Public Health System Leadership: Demonstrate organizational and leadership skills aimed at transforming public health infrastructure and creating healthier environments through dynamic systems thinking, effective written and verbal communication, efficient project management and capacity building, and responsible stewardship of resources.   | 5, 6, 7               | 5                   | 5             | 6               | 6                  | 7                | 7                  | 6, 7, 8       | 1, 3,<br>4, 5, 6 | 6                   | 8                   | 5, 6,<br>7, 8, 9     | 6                  | 6, 7            | 3, 7, 8          | 7                 | 7                 |                    |                    |
| 8.  | Public Health Policy & Advocacy for Health Equity: Advocate for social justice and health equity through use of participatory strategies, inclusive partnerships, high impact media communications, and translation of scientifically rigorous research into public health policies, programs, and practices that yield measureable improvements in population health and elimination of health disparities. | 2,7                   | 4, 5                | 4, 5          | 6               | 6                  | 7                | 7                  | 7, 8          | 3, 4,<br>5, 6    | 6                   | 8                   | 5, 6,<br>7, 8, 9     | 2, 5, 7            | 1, 3,<br>6, 7   | 7                | 7                 | 6, 7              |                    | =                  |
| 9.  | Ethical Public Health Practice: Exhibit personal and professional integrity in all areas of public health education, research, and service that is reflective of the values, ideals, and ethical standards that define public health practice.   | 7                     | 3, 4, 5             | 4, 5          | 6               | 6                  | 7                | 3, 4               | 8             | 1, 3,<br>4, 5, 6 | 6                   | 8                   | 8, 9                 | 1, 7               | 1, 3, 6         | 3, 7, 8          | 1, 3, 7           | 6, 7              | 186<br>1           |                    |

### APPENDIX C

### **BINGHAMTON UNIVERSITY**

| COURSE<br>NAME         | Credit/Contact<br>Hours | COURSE DESCRIPTION  |    | COURSE REQUIREMENTS & LEARNING OUTCOMES   |
|------------------------|-------------------------|---|----|---|
| Foundations of         | 2                       | The course introduces   | 1. | Describe core public health functions and how they are operationalized in public  |
| Public Health          |                         | students to the historical,   |    | health practice to improve population health and reduce health disparities.   |
| PH 510                 |                         | philosophical, theoretical,   | 2. | Investigate social, cultural, economic, structural, and behavioral factors that influence   |
|                        |                         | scientific, and ethical   |    | health and contribute to health disparities.  |
| Required               |                         | foundations of public   | 3. | Assess the role that governmental agencies and non-governmental organizations have  |
|                        |                         | health. The course  |    | in assuring population health.  |
|                        |                         | broadly covers the core disciplines, functions, and                 | 4. | Explain how public health interventions aimed at the primary, secondary, and tertiary levels of prevention are used for control of communicable and chronic diseases. |
|                        |                         | essential services in public health. Students                       | 5. | Appraise the advantages and limitations of population-based approaches to improve public health (education, marketing, engineering, policy, and law).                 |
|                        |                         | will explore how core principles and practices of public health are | 6. |   |
|                        |                         | applied in the local, state,  | 7  | Explore leading and emerging global public health issues and the unique challenges  |
|                        |                         | national, and global context.                                       | ,. | they pose in achieving health equity across populations.  |
| Social &<br>Behavioral | 3                       | This course examines theories, concepts, and                        | 1. | Discuss the key constructs of a wide range of social and behavioral theories as well as their interrelationships and proposed mechanisms for improving health.        |
| Sciences in            |                         | models from a range of  | 2. | Describe the paradigm shift from individual behavior to broader multi-level   |
| Public Health          |                         | social and behavioral   |    | population and social change models and the impact of this shift in transforming  |
| PH 512                 |                         | disciplines that are used in public health research                 |    | public health practice, addressing health disparities, and driving global health advances.  |
| Core                   |                         | and practice. Students will analyze the strengths                   | 3. |   |
|                        |                         | and limitations of these  | 4. |   |
|                        |                         | frameworks in addressing  | 4. | and behavioral approaches in specific health conditions or with diverse populations.  |
|                        |                         | public health problems.   | 5. | Employ social and behavioral sciences in development of programs, policies, and   |
|                        |                         | pablic ficultif problems.   | ٦. | services directed toward multiple targets and levels of intervention in order to  |
|                        |                         |   |    | address a complex public health issue.  |

| COURSE          | Credit/Contact | COURSE DESCRIPTION          |    | COLIDSE DECLIDEMENTS & LEADNING OUTCOMES  |
|-----------------|----------------|-----------------------------|----|---|
| NAME            | Hours          | COURSE DESCRIPTION          |    | COURSE REQUIREMENTS & LEARNING OUTCOMES   |
| Introduction to | 3              | This course provides the    | 1. | Explain the basic concepts of probability, probability distributions, estimation,             |
| Biostatistics   |                | foundation for statistical  |    | variation, hypothesis testing, statistical significance, inference, reliability and validity. |
| PH 515          |                | reasoning and analytical    | 2. | Differentiate between levels of measurement and their implications for selection of           |
|                 |                | methods for public health   |    | statistical methods for analysis.   |
| Core            |                | research. The course will   | 3. | Apply appropriate descriptive and inferential methods based on the research                   |
|                 |                | cover descriptive and       |    | question, type of study design, and level of measurement.                                     |
|                 |                | inferential statistics,     | 4. | Apply methodologic alternatives to commonly used statistical methods when                     |
|                 |                | including parametric and    |    | assumptions of the statistical test are not met.  |
|                 |                | non-parametric methods      | 5. | Interpret results of statistical analyses resulting from hypothesis testing or based on       |
|                 |                | as well as inferences for   |    | confidence limits.  |
|                 |                | independent and paired      | 6. | Effectively communicate public health and statistical data in comprehensible tables,          |
|                 |                | samples. Emphasis will be   |    | charts, and graphs.   |
|                 |                | placed on developing        | 7. | Clearly articulate the statistical methods and results of statistical analyses in narrative   |
|                 |                | statistical software skills |    | form for both professional and lay audiences.   |
|                 |                | and effectively             |    |   |
|                 |                | communicating results.      |    |   |

| COURSE<br>NAME | Credit/Contact<br>Hours | COURSE DESCRIPTION         |    | COURSE REQUIREMENTS & LEARNING OUTCOMES  |
|----------------|-------------------------|----------------------------|----|--|
| Environmental  | 3                       | This course examines the   | 1. | Discuss the major principles in the field of toxicology as they pertain to the         |
| Health         |                         | environment and its        |    | environmental health sciences.   |
| PH 518         |                         | relationship to human      | 2. | Identify sources and exposure routes of environmental and occupational agents.         |
|                |                         | health and disease. This   | 3. | Distinguish the elements of basic human quantitative risk assessment; hazard           |
| Core           |                         | course covers              |    | identification; exposure assessment; dose-response evaluation; and risk                |
|                |                         | fundamental                |    | characterization.  |
|                |                         | environmental health       | 4. | Describe policies that have been developed to manage health risks associated with      |
|                |                         | principles and concepts    |    | exposures to environmental hazards.  |
|                |                         | including agents, sources, | 5. | Examine specific applications of environmental health concepts to fields such as water |
|                |                         | and routes of exposure;    |    | quality, food safety, occupational health, and injury control.                         |
|                |                         | health hazard              | 6. | Analyze peer-reviewed scientific environmental health literature.                      |
|                |                         | characterization and risk  |    |  |
|                |                         | assessment; dose-          |    |  |
|                |                         | response relationships     |    |  |
|                |                         | and causality. Students    |    |  |
|                |                         | will analyze how physical, |    |  |
|                |                         | chemical, biological, and  |    |  |
|                |                         | behavioral-social factors  |    |  |
|                |                         | in human environments      |    |  |
|                |                         | can contribute to          |    |  |
|                |                         | development of adverse     |    |  |
|                |                         | health conditions.         |    |  |

| COURSE<br>NAME                       | Credit/Contact<br>Hours | COURSE DESCRIPTION          |    | COURSE REQUIREMENTS & LEARNING OUTCOMES  |
|--------------------------------------|-------------------------|-----------------------------|----|--|
| Epidemiology I                       | 3                       | The first of two courses in | 1. | Explain the importance of epidemiology for informing scientific, ethical, economic,    |
| <ul><li>– Principles &amp;</li></ul> |                         | epidemiology introduces     |    | and political discussion of health issues.   |
| Methods                              |                         | students to principles for  | 2. | Describe the leading causes of morbidity and mortality, their social determinants, and |
| PH 520                               |                         | examining the               |    | major health promotion / disease prevention activities aimed at reducing the burden    |
|                                      |                         | distribution and            |    | of disease.  |
| Core                                 |                         | determinants of disease     | 3. | Calculate basic epidemiologic and screening measures including incidence density,      |
|                                      |                         | in populations. The         |    | cumulative incidence, and prevalence; absolute, relative, and attributable risk;       |
|                                      |                         | course will cover           |    | standardized rates; odds ratios; sensitivity, specificity, and likelihood ratios.      |
|                                      |                         | indicators of health,       | 4. | Examine the role of surveillance in public health practice and how systematic, ongoing |
|                                      |                         | measures of disease         |    | collection, management, analysis, and interpretation of data can stimulate public      |
|                                      |                         | concurrence, measures of    |    | health action.   |
|                                      |                         | risk and association,       | 5. | Discuss the importance of screening programs in public health practice and how         |
|                                      |                         | infectious disease and      |    | poorly implemented programs can lead to ineffective interventions, higher healthcare   |
|                                      |                         | outbreak investigations,    |    | costs, or increased vulnerability of at-risk groups and individuals.                   |
|                                      |                         | screening and               | 6. | Apply analytic principles and methods to an outbreak investigation of an infectious    |
|                                      |                         | surveillance.               |    | disease.   |
|                                      |                         |                             | 7. | Analyze the strengths and limitations of epidemiologic data sources.                   |

| COURSE<br>NAME | Credit/Contact<br>Hours | COURSE DESCRIPTION                             | COURSE REQUIREMENTS & LEARNING OUTCOMES   |
|----------------|-------------------------|--|---|
| Health Policy, | 3                       | This course will address                       | 1. Discuss the legal basis (statutory and case law) and ethical principles that underpin  |
| Finance &      |                         | public policy                                  | public health.  |
| Management     |                         | development and                                | 2. Compare the organization, financing, and delivery of public health services at the   |
| PH 522         |                         | analysis, and its impact on public health. The | local, state, federal, and global levels examining the roles of governmental agencies, non-governmental organizations, health care and pharmaceutical industries, and |
| Core           |                         | course will explore how                        | other community and commercial entities.  |
|                |                         | legislative/regulatory                         | 3. Articulate data relevant to a public health issue; the policy options available to   |
|                |                         | decisions must balance                         | respond to the issue; and the health, fiscal, administrative, legal, social, and political  |
|                |                         | individual rights and                          | implications of each policy option.   |
|                |                         | public good and discuss                        | 4. Advocate in support of a policy position using the various strategies that influence the   |
|                |                         | factors that influence                         | policy formation process (legal, administrative, and legislative).  |
|                |                         | public health                                  | 5. Develop a policy brief that summarizes a key policy issue and makes  |
|                |                         | policymaking including                         | recommendations for change as well as written testimony that supports the policy  |
|                |                         | advocacy, social justice,                      | position and articulates how the policy change will alter the delivery, financing,  |
|                |                         | and ethics. This course is                     | quality, or accessibility of health care services to improve population health status.  |
|                |                         | designed to provide                            | 6. Discuss historical and contemporary issues related to public health policy and   |
|                |                         | students with the                              | advocacy and how they impact public health services, workforce, practice, and the   |
|                |                         | knowledge and skills to                        | health status of populations.   |
|                |                         | collect, analyze, and                          |   |
|                |                         | communicate                                    |   |
|                |                         | information with key                           |   |
|                |                         | stakeholders in the policy                     |   |
|                |                         | arena.   |   |

| COURSE<br>NAME   | Credit/Contact<br>Hours | COURSE DESCRIPTION  | COURSE REQUIREMENTS & LEARNING OUTCOMES  |
|--|-------------------------|---|--|
| Epidemiology II  – Applied Epidemiology PH 525  Pre-requisites: PH 512, 515, 518, 520, 522 | 3                       | This case-based course will provide opportunities for students to integrate all of the core disciplines as they respond to public health challenges. Students will explore epidemiologic study  | <ol> <li>Compare the utility, strengths, and limitations of the major epidemiologic study designs used to analyze cases of public health challenges.</li> <li>Distinguish between probability and non-probability sampling methods used in epidemiologic studies particularly in relation to their impact on validity.</li> <li>Differentiate between effect modification and confounding including methods for identification and/or control in particular cases.</li> <li>Analyze epidemiologic research to identify sources of error and assess the direction and magnitude of potential biases on measures of effect.</li> </ol> |
| Core   |                         | designs and analyze their strengths and limitations in providing scientific evidence for informing public health practice. Working in interprofessional teams, students will develop plans for identifying and responding to a public health challenge. | <ol> <li>Draw appropriate inferences from epidemiologic data in public health cases.</li> <li>Appraise epidemiologic research for its capacity to inform the evidence base for public health practice and policy in particular cases.</li> <li>Integrate knowledge from core areas in public health to respond to cases of particular public health challenges.</li> <li>Work with inter-professional teams to identify and develop plans to respond to a public health challenge.</li> </ol>  |
| Experimental<br>Public Health 1<br>PH 501  | 1                       | Along with Foundations course, socialization of students in public health practices.  | <ol> <li>Learn the customs of professionalization appropriate to the field</li> <li>Identify and analyze a public health problem in a local practice</li> <li>Communicate with other professionals in other fields to understand what other approaches contribute to understanding and ameliorating public health problems</li> </ol>  |
| Experimental<br>Public Health 2<br>PH 502  | 1                       | Application of public health methods of analysis to problem solving   | <ol> <li>Use epidemiological methods to analyze a problem</li> <li>Recommend modifications in existing programs</li> <li>Report to a board about findings</li> </ol>   |
| Experimental<br>Public Health 3<br>PH 503  | 1                       | Advocacy on behalf of public health policy  | <ol> <li>Write a policy brief and present it</li> <li>Identify legislative bills in support of public health</li> <li>Advocate on behalf of bills, policy changes, programs</li> </ol>   |

| COURSE<br>NAME                | Credit/Contact<br>Hours | COURSE DESCRIPTION                             |    | COURSE REQUIREMENTS & LEARNING OUTCOMES   |
|-------------------------------|-------------------------|--|----|---|
| Population                    | 3                       | This course will examine                       | 1. | Explore the historical development of population health concepts and their potential                  |
| Health I –                    |                         | theoretical models of                          |    | for influencing the determinants and distribution of health.  |
| Concepts &                    |                         | population health as well                      | 2. | Describe the major domains of health and the approaches used to measure health in                     |
| Measurements                  |                         | as the conceptual basis                        |    | populations.  |
| PH 540                        |                         | for measuring population                       | 3. | Discuss contemporary utilization of population health methods to inform decision-                     |
|                               |                         | health status. Students                        |    | making, ensure accountability in health services, improve quality of health care, and                 |
| Selective                     |                         | will examine the methods                       |    | impact health outcomes.   |
|                               |                         | used to monitor                                | 4. | Examine the role of health informatics in collecting, analyzing, and utilizing health                 |
|                               |                         | population health and                          |    | data for surveillance and monitoring of health programs and services.                                 |
|                               |                         | develop the analytic skills                    | 5. | Appraise the validity, reliability, and scientific characteristics of population health               |
|                               |                         | necessary to assess,                           |    | measures.   |
|                               |                         | describe, and compare                          | 6. | ,   |
|                               |                         | the health of populations.                     |    | a population over time, within demographic strata, and across geographic regions.                     |
|                               |                         |  | 7. | Conduct a critical analysis of a public health surveillance or clinical performance                   |
|                               |                         |  |    | monitoring system.  |
| Population                    | 3                       | This course focuses on                         | 1. | Discuss core concepts of vulnerable populations, distributive justice, and health                     |
| Health II –                   |                         | the environmental, social,                     | _  | equity.   |
| Determinants<br>& Disparities |                         | economic, cultural,<br>behavioral, biological, | 2. | Examine environmental, social, economic, cultural, behavioral, and biological determinants of health. |
| PH 545                        |                         | clinical, and regulatory                       | 3. | Analyze, interpret, and present health disparity data in meaningful formats.                          |
| 111313                        |                         | factors that influence                         | 4. |   |
| Selective                     |                         | health. Students will                          | •• | disparities.  |
|                               |                         | develop analytic skills for                    | 5. | ·   |
|                               |                         | investigating,                                 |    | inequalities.   |
|                               |                         | characterizing, and                            | 6. | Appraise the utility of public health theories in promoting health equity among                       |
|                               |                         | addressing health                              |    | populations.  |
|                               |                         | disparities within and                         | 7. | Assess the strengths and limitations of qualitative and quantitative approaches for                   |
|                               |                         | across populations.                            |    | measuring health disparities and informing strategies to advance health equity.                       |
|                               |                         |  | 8. | Investigate community and state-level resources that can be mobilized for program                     |
|                               |                         |  |    | planning and policy development to reduce health disparities.   |

MPH with Two Focus Areas – Syllabi

| COURSE<br>NAME                              | Credit/Contact<br>Hours | COURSE DESCRIPTION   | COURSE REQUIREMENTS & LEARNING OUTCOMES  |
|---|-------------------------|--|--|
| Population                                  | 3                       | The content for this   | 1. Compare the advantages and limitations of population-based approaches (e.g.,  |
| Health III –                                |                         | course takes an ecologic   | education, marketing, engineering, policy, and law) to improve health.   |
| Evidence-                                   |                         | approach to examining  | 2. Use information technologies to search, retrieve, and compile scientific evidence   |
| based                                       |                         | the scientific literature  | related to a population health issue.  |
| Strategies<br>PH 548                        |                         | regarding population<br>health improvement<br>strategies. Emphasis is  | <ol> <li>Examine evidence-based strategies for improving population health and reducing<br/>health disparities at the individual/social, organizational/institutional, and<br/>community/regional levels.</li> </ol>   |
| Selective                                   |                         | placed on critical appraisal and research synthesis with the primary aim of providing the student with essential knowledge, skills, and attitudes for evidence- based practice in population health. | <ol> <li>Conduct a critical appraisal of the research literature assessing accuracy, bias, confounding, error, effect modification (interaction), and precision.</li> <li>Consider magnitude of effect and evaluating the research literature for benefits, potential harms, potential barriers, and alignment with values (acceptability).</li> <li>Determine the strength of the scientific evidence, existence of gaps in the literature, and relevance/applicability of the findings for improving population health.</li> <li>Translate best evidence into a population health practice, program, or policy in order to improve specific health outcomes for an identified population.</li> </ol> |
| Topics in<br>Population<br>Health<br>PH 552 | 3                       | The course explores current topics in global health, varied by instructor.   | <ol> <li>Analyze current public health issues impacting a population.</li> <li>Integrate knowledge of all areas in public health in evaluating current issues, designing programs for improved health, and advocating for policies to improve population health.</li> </ol>  |
| Selective                                   |                         |  |  |

8 48

| COURSE<br>NAME | Credit/Contact<br>Hours | COURSE DESCRIPTION                              | COURSE REQUIREMENTS & LEARNING OUTCOMES  |
|----------------|-------------------------|---|--|
| Population     | 9                       | The internship provides                         | 1. Apply knowledge from the social, behavioral, and organizational sciences to address   |
| Practicum &    |                         | an opportunity for each                         | an identified population health issue.   |
| Capstone       |                         | student to work in a                            | 2. Conduct process and outcome evaluation of an evidence-based population health   |
| PH 597         |                         | public health setting in a                      | initiative.  |
|                |                         | position that carries                           | 3. Work collaboratively with other health professionals using systems thinking, team   |
| Pre-requisite: |                         | responsibility and is of                        | building, negotiation, and conflict management to achieve organizational and project   |
| PH 525         |                         | particular interest.                            | goals.   |
|                |                         | Though each placement is different, all of them | 4. Employ population health improvement strategies that are responsive to the diverse cultural values and traditions of the population being served. |
|                |                         | depend upon completion                          | 5. Use effective written and oral communication across settings and audiences within   |
|                |                         | of most concentration                           | the context of a population health initiative.   |
|                |                         | coursework, the ability to                      | 6. Exhibit professional standards of behavior and application of ethical principles (e.g.,   |
|                |                         | work with minimal                               | justice, beneficence, and respect for persons) when intervening to improve   |
|                |                         | supervision, and                                | population health.   |
|                |                         | permission of the                               | 7. Demonstrate leadership, stewardship, and accountability in planning, designing,   |
|                |                         | student's Faculty Advisor.                      | developing, implementing, and evaluating a population health initiative.   |
| Public Health  | 2                       | This foundational course                        | Explain the functions of the immune system and its role in population health.  |
| Biology        |                         | covers the normal                               | 2. Examine pathogens of public health consequence, their modes of transmission,  |
|                |                         | physiology of human                             | mechanisms of infection, impact on human health, and public health interventions for   |
| PH 517         |                         | growth, development,                            | prevention and control.  |
| Elective       |                         | and aging as well as the                        | 3. Investigate how nutrition and lifestyle behaviors affect biologic function and influence  |
|                |                         | pathophysiology of                              | the development of chronic diseases.   |
|                |                         | disease states with a                           | 4. Explore the effects of biological, chemical, and physical agents on human health.   |
|                |                         | focus on conditions of                          | 5. Analyze the interaction of genetics, lifestyles, and the environment in the health of a   |
|                |                         | public health significance.                     | population.  |
|                |                         | Students will examine the                       | 6. Explain the role of biology in the ecological model of population-based health.   |
|                |                         | mechanisms of infectious                        | 7. Employ information-seeking strategies to investigate emerging public health threats and   |
|                |                         | and chronic diseases as                         | appraise their impact on population health.  |
|                |                         | well as the role of                             | 8. Identify the ethical, social and legal issues implied by public health biology.   |
|                |                         | genetics, nutrition, and                        |  |
|                |                         | health behaviors in                             |  |
|                |                         | relation to population                          |  |
|                |                         | health.   |  |

| COURSE<br>NAME | Credit/Contact<br>Hours | COURSE DESCRIPTION  |    | COURSE REQUIREMENTS & LEARNING OUTCOMES   |
|----------------|-------------------------|---|----|---|
| Program        | 2                       | The purpose of this to  | 1. | Describe the stages of program development, corresponding evaluation functions,   |
| Planning &     |                         | course is to provide  |    | and relevant evaluation questions.  |
| Evaluation     |                         | students with the   | 2. | Develop a logic model to graphically display program goals, objectives, inputs,   |
| PH 524         |                         | requisite knowledge and   |    | activities, outputs, and initial, intermediate, and long-term outcomes.   |
|                |                         | skills to design, develop,  | 3. | Differentiate between formative, process, outcome, and impact evaluation.   |
| Elective       |                         | implement, and evaluate strategies to improve                         | 4. | Compare quantitative and qualitative evaluation methods in relation to their utility, strengths, and limitations in answering specific types of evaluation questions.                         |
|                |                         | individual and community health. This course will cover how to assess | 5. | Explain the role of monitoring in process evaluation including recruitment, participation, reach, dose/exposure, fidelity, implementation, challenges/barriers, and other contextual factors. |
|                |                         | need, articulate program theory, assess program                       | 6. | Create a comprehensive evaluation plan with a detailed budget and budget justification for a public health program that addresses an identified community need.                               |
|                |                         | processes, measure  | 7. | Critique evaluation reports in relation to their quality, utility, and impact on public   |
|                |                         | program outcomes, and   |    | health.   |
|                |                         | analyze program   |    |   |
|                |                         | effectiveness and   |    |   |
|                |                         | efficiency.   |    |   |

| Global Health I  – Concepts & Measurements PH 530       | 3 | This course will introduce students to the characteristics and various approaches to designing and conducting qualitative research projects in health and health services research.  | 2.<br>3.<br>4.<br>5.<br>6.                            | Identify the distinctive types of qualitative methods and their role in global public health research.  Formulate research questions and design a qualitative study.  Address ethical issues associated with qualitative and field methods.  Apply sampling techniques in qualitative inquiry, using data collection including interviews, observation, focus group, and use of documents/existing data.  Engage in data analysis such a transcription, translation, coding, and thematic development and use of data management software.  Articulate the importance of rigor in qualitative methods and strategies for enhancing rigor.  Present qualitative findings to varied audiences to have maximum impact.  Explain the foundations of mixed methods (qualitative-quantitative) and how they may be used.  |
|---|---|--|---|---|
| Global Health II  – Determinants  & Disparities  PH 535 | 3 | The course focuses on current health problems and diseases affecting both pregnant women and children worldwide. The impact of various common health problems at different stages of the life cycle and their functional outcomes in terms of morbidity, mortality, psychological well-being, reproduction and growth will be highlighted. | <ul><li>2.</li><li>3.</li><li>4.</li><li>5.</li></ul> | Articulate the importance of a global approach to women and children's health in the context of globalization and economic development.  Discuss the burden of disease among MCH populations globally and variations in incidence and prevalence both within and across countries.  Identify major MCH health indicators and the challenges of measurement and monitoring in diverse environments.  Examine critical issues in the organization and delivery of public health and health care services to MCH populations.  Discuss how social and cultural factors can affect the vulnerability of mothers, infants, and children to illness and death.  Describe the complexity of local contexts—villages, towns, cities, districts, provinces, and countries—and their importance before applying nationally- and globally-defined interventions or policies.  Explore opportunities to improve maternal and child health care.  Propose evidence-based solutions to the key health problems affecting MCH. |
| Global Health III – Evidence Based Strategies PH 538    | 3 | The course explores relationships between cultures and health promotion and disease prevention efforts globally; it examines   | 1.  | respond to the health consequences of international emergencies.  |

|   | international health care  | 3.  | Appreciate the increasing influence of determinants arising in foreign countries to any   |
|---|----------------------------|---|---|
|   | 1                          |   | country's health and safety.  |
|   | _                          | 4.  | Apply scientific knowledge and leadership tools and resources to promote health,  |
|   | financing, policy and      |   | prevent illness and fight disease around the world.   |
|   | priority setting, and      | 5.  | Utilize lessons learned and best practices to play leadership roles in promoting global   |
|   | current efforts at health  |   | health through improved research, practice and policy-making.   |
|   | care reform. The course    | 6.  | Advocate for multi-dimensional, multi-sectoral and multi-national disease prevention  |
|   | is designed to provide     |   | and control initiatives to improve the health of the people around the world.   |
|   | students with the          | 7.  | Promote the mutual benefits of improving the health status and wellbeing of other   |
|   | knowledge, skills and      |   | countries.  |
|   | competencies to be         | 8.  | Describe the advantages of information sharing and expertise exchange among   |
|   | effective participants in  |   | countries and international partners.   |
|   | efforts to improve the     | 9.  | Promote health system development and reform worldwide through the engagement   |
|   | delivery of health care    |   | of world-wide networks, partnership and public and private health institutions.   |
|   | nationally and             |   |   |
|   | internationally.           |   |   |
| 3 | The course explores        | 1.  | Analyze current public health issues impacting a global population.   |
|   | current topics in global   | 2.  | Integrate knowledge of all areas in public health in evaluating current issues, designing   |
|   | health, varied by          |   | programs for improved health, and advocating for policies to improve global health.   |
|   | instructor.                |   |   |
|   |                            |   |   |
| 9 | The internship provides    | 1.  | Mobilize technical expertise and socio-cultural awareness and apply knowledge of  |
|   | an opportunity for each    |   | communication skills to develop and administer strategies in global public health.  |
|   | student to work in a       | 2.  | Navigate institutions and mechanisms through which global health policies and   |
|   | public health setting in a |   | programs are designed and implemented.  |
|   | position that carries      | 3.  | Create a comprehensive evaluation plan with a detailed budget for a global public   |
|   | responsibility and is of   |   | health program that addresses an identified community need.   |
|   | particular interest.       | 4.  | Plan and develop a process for evaluating programs and services directed toward   |
|   | Though each placement is   |   | resolving a specific global public health issue.  |
|   | different, all of them     | 5.  | Formulate policies directed toward both health promotion and disease prevention in  |
|   | depend upon completion     |   | response to a specific global public health issue.  |
|   | of most concentration      | 6.  | Assess the role of leadership skills in providing effective bridges between global health   |
|   |                            |   | research and practice settings.   |
|   |                            | _   | ·   |
|   | work with minimal          | /.  | Communicate global health issues, causes, and solutions to diverse stakeholders   |
|   |                            | systems, their organization and financing, policy and priority setting, and current efforts at health care reform. The course is designed to provide students with the knowledge, skills and competencies to be effective participants in efforts to improve the delivery of health care nationally and internationally.  3 The course explores current topics in global health, varied by instructor.  9 The internship provides an opportunity for each student to work in a public health setting in a position that carries responsibility and is of particular interest. Though each placement is different, all of them depend upon completion of most concentration coursework, the ability to | systems, their organization and financing, policy and priority setting, and current efforts at health care reform. The course is designed to provide students with the knowledge, skills and competencies to be effective participants in efforts to improve the delivery of health care nationally and internationally.  3 The course explores current topics in global health, varied by instructor.  9 The internship provides an opportunity for each student to work in a public health setting in a position that carries responsibility and is of particular interest. Though each placement is different, all of them depend upon completion of most concentration coursework, the ability to |

|  | permission of the          |  |
|--|----------------------------|--|
|  | student's Faculty Advisor. |  |



### Appendix D, External Instruction Form

Form 2E

This form is required when external instruction is part of the degree requirements in an academic program. External instruction includes internships, field work, clinical placements, cooperative education, service learning, and the like, which are offered in cooperation with external partners, such as business and industry, health care facilities, public agencies, or schools.

Use the table below (expanded as necessary) to summarize proposed arrangements for required
external instruction in an academic program. List all proposed arrangements. The number of
placements listed below should equal or exceed the number of students expected to be in the initial
cohort of a new program.

| Name and Title of Contact Person  | Name and Address of Placement Site       | # of placements<br>per year |  |
|-----------------------------------|--|-----------------------------|--|
| Sean Britton, Director            | Broome County Health Department          | 5                           |  |
| Sharon Chesna, Executive Director | Mothers and Babies                       | 4                           |  |
| Jamie M. Kelly, Director          | Broome County Office for Aging           | 1                           |  |
| John C. Salo, Executive Director  | Rural Health Network, So. Central NY     | 3                           |  |
| Jennifer Lesko, President/CEO     | Broome County Urban League               | 3-5                         |  |
| Marcia Kasprzyk, Director         | Schuyler County Public Health Department | 3                           |  |
| Robert E. Page, Director          | Chemung County Public Health Department  | 'some'                      |  |
| Robin Alpaugh, Executive Director | United Way of Broome County              | 3                           |  |

2. For clinical placements for programs leading to <u>professional licensure in a health profession</u>, **append** documentation to demonstrate each site's commitment to a numerical range of students each year, and the time period of its commitment. The documentation should be signed by the responsible official at each proposed clinical site.

See Appendix A for letters of commitment. Since the MPH is not professionally licensed, we placed the letters there.

3. In the table below, list the individual(s) at the campus (or at each campus, in the case of multi-institution programs) who will have responsibility for oversight and administration of external instruction.

| Name        | Title                  | Email Address |  |
|-------------|------------------------|---------------|--|
| To be hired | Director of Placements |               |  |
|             |                        |               |  |
|             | 9                      | ii ii         |  |

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### Binghamton University - MPH Faculty Director

Thank you for considering Binghamton University in your search.

#### About Binghamton University:

Binghamton University is a world-class institution that unites more than 130 broadly interdisciplinary educational programs with some of the most vibrant research in the nation. Our unique character - shaped by outstanding academics, facilities and community life - promotes extraordinary student success.

Binghamton merges rigorous academics, distinguished faculty and state-of-the-art facilities to engage and challenge its 17,000 students. The high-achieving Binghamton student body also represents a great diversity of life experiences, from first-generation college-goers to international students. Beyond their talent, these classmates share a desire to shape the future through technology, insight, intellectual exploration and community service.



#### Job Description:

Binghamton University seeks a founding director for its new Master's in Public Health Program. The successful applicant will start at the Associate or Full Professor level, with tenure, in August 2017 and develop a strong program contributing to the university's transdisciplinary focus on health sciences.

The Founding Director will have a PhD and a strong record of research in any area of public health, success in obtaining grant funding, and evidence of organizational, leadership, and team-building skills. The successful applicant will develop and lead a high quality Program in Public Health, stimulate effective research collaborations, coordinate teaching and program development with faculty from a wide variety of disciplines, and achieve accreditation for the program from the Council on Education for Public Health (CEPH). We are especially interested in candidates who have prior experience leading an MPH Program through successful accreditation.

Binghamton's generalist MPH program offers electives providing a focus in global health or population health. Working in collaboration with faculty from nursing, pharmacy, social work, biomedical anthropology, Africana studies, human development, mathematics, systems science and industrial engineering, and other fields, as well as the Broome County Department of Public Health and other external constituents, the Founding Director will lead the implementation of a program slated to begin in fall 2017.

This tenure-track appointment is planned at the full or associate professor level, with a research focus in any core area or in global or population health.

#### Requirements:

Applicants must have a PhD in a field related to the study of public health. They are expected to have an established record of scholarly research in any core area of public health or in global or population health, external funding, high quality teaching, and successful administrative experience.

#### Additional Information:

It is the policy of Binghamton University to provide for and promote equal opportunity employment, compensation, and other terms and conditions of employment without discrimination on the basis of age, race, color, religion, disability, national origin, gender, sexual orientation, veteran or military service member status, marital status, domestic violence victim status, genetic predisposition or carrier status, or arrest and/or criminal conviction record unless based upon a bona fide occupational qualification or other exception.

#### Application Instructions:

Please submit a cover letter, a CV, and three reference letters; we would like them to be submitted by the referees soon after the application is submitted. This position will be open until filled.

# SUNY The State Linversity of New York

### Appendix F

### **External Evaluation Report**

Form 2D Version 201-08-02

The External Evaluation Report is an important component of a new academic program proposal. The external evaluator's task is to examine the program proposal and related materials, visit the campus to discuss the proposal with faculty and review related instructional resources and facilities, respond to the questions in this Report form, and submit to the institution a <u>signed</u> report that speaks to the quality of, and need for, the proposed program. The report should aim for completeness, accuracy and objectivity.

The institution is expected to review each External Evaluation Report it receives, prepare a single institutional response to all reports, and, as appropriate, make changes to its program proposal and plan. Each separate External Evaluation Report and the Institutional Response become part of the full program proposal that the institution submits to SUNY for approval. If an external evaluation of the proposed program is required by the New York State Education Department (SED), SUNY includes the External Evaluation Reports and Institutional Response in the full proposal that it submits to SED for registration.

**Institution: Binghamton University** 

Evaluator Name (Please print.): Rosemary M. Caron, PhD, MPH

Evaluator Title and Institution: Professor and Chairperson, Department of Health Management and

Policy, College of Health and Human Services, University of New Hampshire

Evaluator Signature: 9

Proposed Program Title: Public Health

Degree: Master of Public Health (MPH)

Date of evaluation: October 12, 2016 - October 14, 2016

I. Program

1. Assess the program's purpose, structure, and requirements as well as formal mechanisms for program administration and evaluation. Address the program's academic rigor and intellectual coherence.

### **Purpose**

According to the New Program Proposal, the MPH Program offered at Binghamton University, (hereinafter referred to as the MPH Program), will prepare public health graduates ready to address critical public health needs identified in the community (e.g., high rates of obesity and diabetes, rural health issues, aging population, opioid epidemic). The MPH Program would complement the expanding life science and health-related programming (e.g. School of Pharmacy and Pharmaceutical Sciences, nursing, and social work) that is being relocated to Johnson City. Further, the proposal states that since public health programs focus on improving the health of the population, an "MPH degree is an investment in better health at lower costs." Another reason is the result of the ACA which is expected to move health care services nationally from a "fee-for-service to a value-based performance system" which the authors of the proposal claim will create a demand for "better public health programs in prevention, disease management, and public education." In addition, the authors state the fact that public health crises (e.g., Ebola outbreak, Zika virus) know no

boundaries and can spread quickly to affect U.S. communities, thus educating a public health workforce prepared to manage and mitigate these threats is warranted.

Recommendation: The purpose of the MPH Program at Binghamton University accurately reflects the status of the dynamic public health environment. Stating how the purpose of the MPH Program will help to fulfill or complement the University's mission, vision, and strategic planning efforts would assist in furthering to establish the development of the MPH Program at this time.

### Structure and Requirements

The Program is scheduled to be offered during the day in a traditional, face-to-face format on the Binghamton University campus. Eventually, the graduate program will move to the new Health and Science Technology Park in Johnson City. The MPH Program is proposed to be a 48-credit program with 9 core courses, 3 concentration areas, 2 electives, and 1 practicum/internship/capstone.

Recommendation: Considering the administration of the MPH Program may seek accreditation by the Council on Education in Public Health (CEPH) in the near future, I would recommend to the extent that the criteria for CEPH accreditation can be considered and built into the MPH Program now, may help to facilitate this important endeavor when you are ready. In light of this potential goal, I would recommend that you decrease the number of core courses from 9 to 5-6. The remaining courses could be required courses. Also, revising the title of "concentration" to "focus" is in line with CEPH's semantics and thus, would not require the hiring of 3 new full-time, tenure-track faculty for each focus area, but using the word, "concentration" would flag this for CEPH. Such an approach would enable to you to be categorized as a "generalist" MPH Program according to CEPH nomenclature and you would still be able to offer courses in the two designated foci of global health and population health.

As you become more familiar with the CEPH criteria, I would also strongly encourage you to align your course competencies with those presented by CEPH (which should be finalized in early 2017). In addition, be sure the course descriptions and learning objectives are appropriate for each course listed in the proposal. Another reason it would be important to be familiar with the direction of CEPH competencies as you develop the MPH Program, is that you would be able to build into the curriculum (and budget) areas for which you know you will be assessed in the future. For example, where will you build in the competencies for public health finance? Will you be able to demonstrate this competency in a series of courses in the curriculum or do you need to develop a standalone course in this area? Further, how will you provide an opportunity for your students to actually advocate for a particular public health issue?

In our meetings with faculty, we heard that the current baccalaureate students at Binghamton University prefer the flexibility to select elective courses of interest to them. Revising the curriculum, with respect to core and required courses, opens the possibility for more elective courses to be introduced into the curriculum, thus allowing for broad appeal by potential MPH students. This point could also be used as an important marketing tactic.

Another point for consideration is the clarification of the purpose, content, expectations, and assessment for the practicum/internship/capstone courses. As described, these courses are indistinguishable and need to be presented in a way that reflects the practical and/or research intent of these experiential learning opportunities. In the University of New Hampshire's MPH Program, the Field Practice Placement (i.e., internship) is conducted on an individual basis in a public health setting for 100 hours. The MPH student works on a project for that organization during this time. The student traditionally finds their own placement site, although there is a Field Practice Placement Coordinator who can help and this person also helps to facilitate the requirements of the student and the preceptor. The MPH students present their work in a poster session at the annual meeting of the New Hampshire Public Health Association. The students'

projects and poster presentations are judged by public health practitioners who did not host a MPH student for his/her internship.

Another significant point, is the field work the MPH students will be doing with community stakeholders, along with many other Binghamton University programs (e.g., Social Work, Nursing) that rely on their community partners, is to avoid, to the extent possible, "donor fatigue." How will you assure the doors to these agencies will remain open for student experiences? How will the relationship amongst these academic partners and a limited number of community stakeholders be continually revitalized? Preceptor Appreciation Days is a great idea and was organized by the Nursing Program on the last day of our visit. How else will you work to continually develop and reaffirm existing partnerships without wearing them out? This point could not only have implications for your eventual CEPH accreditation efforts but also for your regular operations of the MPH Program. You may also consider establishing Memoranda of Understanding (MOU) with the various preceptors to help reduce the potential for "burn out" in having to place many students from various degree programs.

In contrast, the capstone course at the University of New Hampshire, the culminating course in the curriculum, has traditionally been a group-based project whereby the coordinator for the course identifies the public health agencies and organizations that the pre-assigned groups of students will be working in for the last 8 weeks of the semester. The projects the student teams work on are very specific to that organization and reflect a real issue or problem the organization is experiencing. Thus, a consultant-based model is implemented and the students need to work effectively and efficiently as a group to solve the issue and/or develop the deliverable. The students present their work to the Board of Directors for each respective organization. This format allows for a very "real world" approach to the practice of public health.

Also, while you are considering aligning your MPH Program with the CEPH criteria early on in your graduate program's development, I encourage you to contemplate developing professional development or continuing education opportunities, such as a speaker series, for your program stakeholders.

Another point to consider, from the structural aspect of the curriculum, includes the integration of courses. CEPH will be looking to see how the courses you present are not only connected but integrated. How will they know that a student in an Epidemiology course will be studying HIV/AIDS not only from an epidemiological perspective but are also examining the social and behavioral and policy aspects of the issue? One approach is to have several courses team taught by faculty with expertise in complementary areas. This is a wonderful approach, however, it could create conflicts with respect to faculty workloads and equity issues that I will address later in the report. Another approach to consider is the utilization of service learning for the student to engage in an integrated learning experience. Lastly, the expertise present on campus with respect to Interprofessional Education (e.g., Interprofessional Communication and Interprofessional Ethics courses) also should be explored to highlight this very important "real" approach to how public health work is actually practiced. By its nature, interprofessional education can offer an integrated experience for students. The School of Pharmacy will be an excellent resource for the development of this approach.

Further, the opportunities exist (or will shortly, with respect to the School of Pharmacy) for the MPH Program to, once established, to explore the possibility of developing joint degrees (e.g., MSW-MPH, RN-MPH, MPA-MPH, Spanish-MPH, etc.) and certificate offerings (which could enhance specific skill sets, e.g., Geographic Information Systems (GIS), Analytics, Emergency Preparedness). Also, 3+2 or 4+1 programs are also a possibility with various majors across campus (e.g., biology, nursing, political science, anthropology). This approach is similar to the 3+4 Pharmaceutical Science degree that currently exists at Binghamton University. These possible ventures, along with distance education opportunities, should be

explored only after the foundational, generalist MPH Program has been developed and has demonstrated success.

### Administration

The MPH Program plans to hire a MPH Program Director and Assistant Director to help administer and lead the development and implementation of this graduate Program. These two hires would also work to help coordinate the internship and capstone experiences, as well as pursue CEPH accreditation when ready.

Recommendation: The MPH Program is clearly supported by the administrative leadership of Binghamton University, per our in-depth discussions during our on-campus visit. Considering that the MPH Program Director will be responsible for getting the MPH Program accredited by CEPH, you may consider making this position a 12-month appointment with a raise in the expected salary; or, it could be a 9-month appointment with an administrative stipend for work to be conducted over the summer. CEPH accreditation efforts are time consuming and it is a detailed process, however, hiring someone who may have prior CEPH accreditation experience could help reduce the anxiety (among faculty and administration) that accompanies such a process.

It is also important for the MPH Program Director, which is viewed as an important leadership position, in the Graduate School and the University, as a whole, to be able to hire 2-3 faculty that he/she believes will further promote the direction of growth of this graduate program. Further, this model of housing the MPH Program in the Graduate School has the potential to increase integration of faculty, students, and curricula, and it could reduce and complement competing demands.

Lastly, I would recommend that the MPH Director, with the Assistant Director, Administrative leadership, and teaching faculty, work to develop a mission, vision, and eventually a strategic plan that complements the Graduate School's and University's mission, vision, and strategic plan. This graduate program is unique at the University in that it is not housed in a Department but rather the Graduate School. Thus, in its unique role, it is an exemplar for future graduate programs that the University may want to offer so it is breaking new ground for future graduate programs that may follow.

### **Evaluation**

The authors state that "student learning outcomes will be assessed at regular intervals by the faculty to determine how effectively graduates have attained the desired knowledge, skills, and competencies..." Feedback from these assessments will inform course and curriculum improvement efforts. Furthermore, the Certified in Public Health (CPH) exam will be required of students in the MPH Program and their performance will be noted by the administrators of the MPH Program. In addition, job placement and satisfaction for graduates of the MPH Program will also be collected. Exit surveys of all students will also be conducted.

The Assistant Program Director will be responsible for assessing "student learning and curricular effectiveness." Regular student self-assessment opportunities will be provided and faculty revision of learning outcomes will be modified as needed.

Recommendation: I would recommend that the MPH Program Director and Assistant Program Director establish formal Committees specific to the Accreditation effort, Assessment Methods, and Curriculum. These Committees should meet individually to address their specific charges and there should be opportunities for them to come together and meet as a larger body. It would be the responsibility of the MPH Program Director and/or Assistant Program Director to inform each respective Committee of the work of each body. These Committees need to meet on a regular basis.

Assessment is an ongoing process and needs to always be tweaked. I think the proposed methods to assess learning outcomes, performance on the CPH exam, and exit interviews are useful. However, I would recommend including additional information to describe these efforts. For example, specifically how will you know if the learning outcomes outlined were actually achieved? The faculty need to consider how they will measure the outcomes on this point. For example, consider implementing a pre- and post-test in each course; to test the transfer of knowledge, offer a quiz at the beginning of a course on basic skills and content that the student is expected to know. Should the student not pass the low-stakes or no-grade quiz, a remedial assignment could be given prior to their fully matriculating in the course. Another suggestion is to meet with students via a Student Council setting to check in regularly to hear from them, in an informal setting, what is working in the courses and what areas may need improvement. Another idea is, in addition to an exit interview, require an exit exam to see how your students fare prior to graduating from the program. Some Health Administration programs, for example, require a specific grade to actually graduate - this is certainly a high stakes approach. However, if you were to offer an exit exam (not tied to graduation) but maybe it comprises a certain percentage of the grade in the capstone course, the culminating course in the program, this would provide some "weight" to the assessment and the leadership and faculty of the MPH Program could assess in what areas their students excel and in what areas the curriculum may need to be revised.

Lastly, regular checking in with employers of the graduates of the MPH Program would be helpful, not only for placement information, but also to have a frank conversation on how graduates of the program are performing in the "real world" setting.

### Address the program's academic rigor and intellectual coherence.

The MPH Program's academic rigor and intellectual coherence are well-developed and offer a respectable generalist MPH degree with the opportunity for focused study in global health or population health. The faculty and administrative leadership should consider enhancing the quantitative components of the course via an integrated approach. For example, consider an Applied Epidemiology course that utilizes biostatistics in place of an Epidemiology II course. Integrating the curriculum will enhance the rigor of the program. Similarly, we had also discussed increasing the opportunities for service and experiential learning opportunities via several practicums, an internship, and the capstone project (which could have a research or practice-oriented track). The recommendations provided within this section, and the remainder of the report, are intended to further strengthen the development, implementation, and evaluation of this significant graduate degree program. This MPH Program is starting with a solid academic platform and if the recommendations posed herein are implemented, the intellectual coherence will be even more robust compared to its current format.

2. Comment on the special focus of this program, if any, as it relates to the discipline.

### **Special Focus**

The MPH Program has proposed two foci: global health and population health.

Recommendation: In the previous section, I recommended that theses concentration areas be converted to foci for the purposes of CEPH accreditation. We met faculty who would be teaching in each of these respective foci. However, it is not clear from the proposal as to why these two areas were selected as the foci for this MPH Program. Were these foci selected because the University has the faculty expertise in these areas or were these foci selected for emphasis because global health and population health issues are an issue for this locale or region? The proposal mentions that due to the world being a small place, no community is immune from being affected by an issue impacting one country that is very far away. With respect to population health, the ACA and the Delivery System Reform Incentive Payment Program in New York is mentioned. However, including quantitative and qualitative data to support why these two foci should be the foci for this MPH Program is important. This information could be accessed via surveys with students in the feasibility study, faculty across campus, and the stakeholders/employers for this MPH Program. I agree that these are two very exciting areas for public health research and practice but what information can you provide to support that this is the right direction for your MPH Program?

3. Comment on the plans and expectations for self-assessment and continuous improvement.

### Self-assessment and Continuous improvement

Section 2.7 Program Assessment and Improvement describes the MPH Program's approach to this important task. I also addressed this point in Question 1, Evaluation.

Recommendation: In addition to the recommendation I provided in Question 1, Evaluation, I would also recommend that the Binghamton MPH Program become a member of the Association of Prevention Teaching and Research (APTR, <a href="http://www.aptrweb.org/">http://www.aptrweb.org/</a>) or the Association of Schools and Program in Public Health (ASPPH, <a href="http://www.aspph.org/">http://www.aspph.org/</a>). APTR is more affordable to join with an annual membership currently less than a \$1,000 for a Program and ASPPH's membership is considerably more expensive. Membership in one or both of these organizations will enable the MPH Program Director and Assistant Director to stay connected with similar programs which is beneficial when seeking input and experience about accreditation and programmatic issues. Resources (e.g., teaching materials, career tools, employment postings, input on accrediting criteria">https://www.aspph.org/</a>) are also provided to the MPH Program's faculty and students of member programs.

The self-assessment methods I mentioned in Question 1, Evaluation, were specific to assessing the learning outcomes for the students. Assessing the overall functioning and effectiveness of the MPH Program from a programmatic perspective is also important. For example, are the Committees that have been established productive? Are the charges they have been assigned being met in a timely fashion? MPH Programs need to stay nimble, that is, responsive to the changing public health needs of the community, region, nation, and abroad. I would also argue that the leadership of an MPH Program, especially one that is not housed in a single department, should also operate in a way in which "one size does not fit all" considering that the faculty who will be a significant component of this Program's "lifeblood" will be coming from different Departments with different organizational cultures. Thus, recognizing that the need to frequently change how meetings are run, the expectations for deliverables, and the constant need to change one's teaching style and assessment methods for a dynamic graduate program may come more naturally to some than others.

With respect to continuous improvement, I would recommend pulling from the field of quality improvement in health care and try PDSA cycles. That is, the Director should "plan, do, study, and act" for each initiative he/she chooses to address. Develop the approach, implement it, study what worked or didn't work, and implement changes accordingly. This process should be inclusive and done on a regular basis with various initiatives and stakeholders.

4. Discuss the relationship of this program to other programs of the institution and collaboration with other institutions, and assess available support from related programs.

### Relationship

This MPH Program will be housed in the Graduate School of Binghamton University and not in a single Department. The MPH Program has established relationships with the Colleges on campus. Specifically, the School of Pharmacy and the Colleges that house the social work, biomedical anthropology, nursing, and psychology departments will work closely with the MPH Program's administration. It is clear from the proposal that this transdisciplinary MPH Program is supported by the faculty we met with from these respective Departments.

In addition to faculty support, the School of Pharmacy has also offered resources in the form of space via classrooms, a simulation laboratory, and the potential for joint programming (this holds true for many of the Departments that will be represented in the MPH Program and is discussed further in Question 5.)

Recommendation: The enthusiasm for the MPH Program among the various representatives from other Departments across campus was palpable. In many cases, there is an existing professional working relationship among the Departments via existing joint degree programming and/or Committee work, for example the work of the Transdisciplinary Areas of Excellence (TAE) Committee.

The respect and camaraderie among these faculty experts was evident when we met with them. I would expect this formidable working relationship to continue once the MPH Program is established due to the strong academic infrastructure that already exists at the University. I would recommend that the administration of the MPH Program continuously explore new, sensible working relationships with other programs on campus, while also taking the time to nurture the already existing collegial partnerships. This seems to come naturally to the administrators and faculty we met with during our visit so I would expect this approach to continue.

5. What is the evidence of **need** and **demand** for the program locally, in the State, and in the field at large? What is the extent of occupational demand for graduates? What is the evidence that demand will continue?

### Need/Demand

The authors state the anticipated national public health workforce shortage, the global public health issues (e.g., Zika) that reminds us the world truly is a very small place, and the change in the state's Medicaid system called DSRIP are all factors that warrant the need/demand for the MPH Program.

Recommendation: I would recommend that a "needs assessment" or sometimes referred to as a "demand assessment" be done to assure that "If you build it, they will come." The philosophy behind developing a public health program is noble, however, the need for such a program in this area should be examined and supported by available data. If it has been examined, I would strongly recommend that the data which supports the need for an MPH Program offered by Binghamton University be included in the proposal. Data is provided which projects the growth in public health employment positions to significantly increase at the national level. Will employers in the local Binghamton area and the State of NY, as a whole, hire the

public health graduates you prepare? A survey specific to the intent of the graduate program and whether the identified (local, statewide, and regionally) critical stakeholders would employ your graduates would help to address the question of "program need or demand." To identify the public health problems in the area is important but not sufficient reason to establish a MPH Program. What data supports that if you create the MPH Program you envision, that employers in the local area, the State, and beyond will hire your graduates? Start with identifying the need/demand for the Program and then the structure, delivery, curriculum and competencies will be developed by an informed decision-making process. (A search of JobsEQ identified top industries that would employ public health graduates. Entities specific to the New York and Binghamton areas should be identified in the proposal. In addition, the Table in Section 2.3, h(2) – Program Descriptions, Purpose, and Planning needs to be more specific in its presentation, e.g., identify these facilities and quantify the projected positions.)

Furthermore, I would like to emphasize the importance of your stakeholders in this MPH Program. Certainly, the faculty and administrative leadership at Binghamton University are key stakeholders for the development, implementation, evaluation, and overall success of this graduate program. In addition, who you invite from the community to serve in an advisory capacity to inform your decision-making processes can not be understated. I would encourage you to invite stakeholders who have their finger on the pulse of the health issues in the community. Who works in the changing healthcare landscape? Who is peripherally, but very importantly, a contributor to improving health in the community (e.g., transportation agencies, faith-based entities, farmers' markets, housing authorities, political leaders, etc.) – think broadly. Consider the social determinants of health and let them guide your selection process. The MPH Program Director should keep in regular contact with these stakeholders and meetings should occur routinely, not only for CEPH's purposes when you pursue accreditation, but also so the MPH Program is operating in an informed, directed manner.

These stakeholders are important to the overall success of your MPH Program. I would encourage you to include them early on in this process – even before or while this proposal is being reviewed by the SUNY system. You need "community buy in" for the MPH Program. The community needs to feel that they have a part in this significant initiative – let them have a voice and listen to their voice. I don't envision that the community, once approached, would say that they would prefer a different graduate program, such as a Master's in Public Policy, but they might. So, what do you do when the needs/demands of the community do not align with the MPH Program's vision? You work with the community to find common ground so that you are able to develop a MPH Program, and maybe develop a certificate offering in public policy, as well. Compromise with the community is the key to success.

These stakeholders are also critical to the sustainability of the MPH Program. MPH Programs need to be nimble in this day and age of impressive growth of MPH Programs across the country. By being informed by your stakeholders will allow you to respond to the changes that quickly occur in this age of healthcare reform. Sustainability may involve the development of joint degrees and certificate programs. Routine assessment of the MPH Program's effectiveness will help to inform the sustainability of this graduate program and allow the MPH Program to be a sought after source of public health knowledge and skills.

Furthermore, since your intended target audience includes upper class baccalaureate students intending to graduate from Binghamton University in the near future, you may consider conducting a feasibility study with this group as another means to identify the need/demand for the MPH Program. Such a process would require conducting a survey among Junior and Senior students in which the purpose, curriculum, delivery method, and potential employment opportunities locally and nationally are briefly outlined for the MPH Program, and then these students would be queried as to their interest level in all of these areas. This would help you gauge the interest level of your intended audience. You could also have an open comment section where students could provide comments on components of a graduate program that would be an

important consideration for them when they are reviewing graduate programs. Surveying all Juniors and Seniors at the University might also enlighten the administration about majors, not previously considered, who may be interested in an MPH degree.

Lastly, although the other NY-based MPH Programs and Schools of Public Health are mentioned, it is not clear how the Binghamton MPH Program would serve a need that is not currently served by the already existing MPH Programs in the state. I would recommend further describing how your Program is different from your competitors. Also, the statement that there are 497 students in the MPH Programs in the SUNY system is "[a] clearly insufficient number to respond to the growing needs in New York and beyond" requires some context and supporting data. How do you know that ~500 MPH graduates aren't sufficiently responding to New York's growing public health needs? Do you have data supporting the percentage of these graduates who leave New York to practice public health? Coming from New Hampshire, 500 MPH graduates would more than saturate our employment market. How do you know this is not the case for New York?

### II. Faculty

6. Evaluate the faculty, individually and collectively, with regard to training, experience, research and publication, professional service, and recognition in the field.

### **Evaluate the faculty**

Fifteen full-time faculty will be dedicated to the MPH Program. Four part-time faculty, three of whom present with practical experience, will teach in the MPH Program. These faculty present with excellent training and complementary skill sets to be able to provide for a solid, generalist MPH education, as well as provide expertise in the two planned foci in global health and population health. In reviewing the SUNY Faculty Table, there appears to be sufficient coverage for planned courses in the curriculum. The faculty we met with were clearly enthusiastic about the development of the MPH Program.

Recommendation: Maintain regular communication with the teaching faculty by establishing an MPH Program Committee that is comprised of these valuable personnel. I would recommend regular monthly meetings with the teaching faculty to discuss what is working well, not working well, and to use this time to communicate consistent messages about the progress or planned changes for the MPH Program.

It was also clear when meeting with many faculty, that they were already collaborating on research projects and that the potential exists for new research collaborations to develop.

It is not possible to evaluate the research and publication, professional service, and recognition in the field for the faculty listed in the SUNY Faculty Table since this information is not presented. To fully answer this question, you may consider including a brief bio for each teaching faculty member that includes this specific information, as well as the faculty member's rank and tenure status.

7. Assess the faculty in terms of number and qualifications and plans for future staffing. Evaluate faculty responsibilities for the proposed program, taking into account their other institutional and programmatic commitments. Evaluate faculty activity in generating funds for research, training, facilities, equipment, etc. Discuss any critical gaps and plans for addressing them.

### Faculty assessment and responsibility

The teaching faculty, both full- and part-time, in the MPH Program have all earned their doctorate degrees at respectable and renowned educational institutions. The MPH Program plans to hire a Director at the Associate Professor or Full Professor ranking. In addition, an Assistant Director will be hired. The primary responsibility of the MPH Program faculty will be to teach the courses that comprise the curriculum. Faculty will not be required to generate funds for research, training, facilities, equipment, etc. but will be encouraged to do so, in order that they may help to provide for their own research agenda, and as it relates to public health.

### Recommendation:

For many courses, numerous faculty can provide coverage. This is helpful should an individual faculty member's department not be able to release them from home department teaching commitments.

A strength to this proposal is the transdisciplinary approach by utilizing faculty from various disciplines to educate the future public health workforce. The fact that the MPH Program will be housed in the Graduate School, as opposed to an individual department, presents both a strength and a potential weakness. This is a strength in that the Graduate School has the potential to increase integration of faculty, students, and curricula, and it could reduce and complement competing demands. The potential weakness could present itself with respect to faculty workload issues and equity. For example, the plan to have faculty from various

departments teach in the MPH Program is to offer their home department a course buyout. This is a traditional approach to be able to utilize faculty from different disciplines. However, what assurance does the administration of the MPH Program have that a sufficient replacement instructor will be found for the course from which the faculty member was bought out? This is ultimately an issue for the Department Chair to solve. We heard that the Department Chairs are supportive of the MPH Program and the course buyout approach. However, I would recommend that the MPH Program administration keep in close communication with the Chairs of the Departments that are providing faculty resources to support the MPH Program. I would also recommend that the MPH Program administration speak with Department Chairs to discuss issues around workload and equity. For example, would untenured faculty teaching in the MPH Program be evaluated differently if they have consistently smaller class sizes compared to others in their home department?

The Analytics Program (MS graduate program) at the University of New Hampshire, which is also housed in the Graduate School and utilizes faculty from various departments, utilizes a course overload model to access the necessary faculty to be able to teach in their graduate program without causing the potential for disruption in the faculty member's home department. This approach is used for tenured faculty. Junior faculty are not invited to teach in this graduate program until they have successfully completed the promotion and tenure process. This approach is not without its issues as sabbaticals, research commitments, or other professional obligations may prohibit a reliable source of expertise from regularly being available to teach.

A point of note is remember not to cross-list core or required courses with other departments as CEPH will not recognize them as specific public health courses. This approach is fine for elective courses. Also, once the curriculum is adjusted to reflect a generalist MPH Program, the issue of illustrating a faculty member as 100% in the Program and 100% in a concentration area will be removed.

### 8. Evaluate credentials and involvement of adjunct faculty and support personnel.

### **Adjunct Faculty and Support Personnel**

An Assistant Director and Secretary will be hired to support the MPH Program. The MPH Program is not heavily reliant on adjunct faculty.

Recommendations: I would encourage the MPH Program to utilize guest speakers from the world of public health practice in the classroom. The stakeholders in your MPH Program are a wonderful resource that should be invited into the classroom. Hearing from someone who works in the field only enhances the course material. I would discourage replacing core MPH faculty with adjunct faculty unless there is a semester where a core faculty member could not teach and another core faculty member is unable to cover for them. CEPH likes to see that the MPH Program invites the "real world" into the classroom but the MPH Program should not be heavily reliant on public health practitioners as core faculty, in my professional experience.

### III. Students

9. Comment on the student population the program seeks to serve, and assess plans and projections for student recruitment and enrollment.

**Student population** 

The MPH Program's target audience is recent graduates from baccalaureate programs, specifically baccalaureate programs offered at Binghamton University and in the Northeast.

Recommendation: The proposal discusses the admissions criteria for students and how underrepresented groups will be encouraged to enroll. However, the proposal does not specifically state that recent baccalaureate graduates are the target audience. I acquired this information via discussions during my campus visit. I would recommend specifically stating who your target audience is in the proposal.

I would also recommend that the MPH Program conduct a feasibility study, as previously mentioned, and work closely in marketing the MPH Program to those Departments on campus whose students identified an interest in pursuing public health graduate education.

We noted the Binghamton University brand while we were on campus. I would recommend working with the marketing experts to promote this special graduate program (via social media) to the target audience, in addition to the planned attendance at college fairs and conferences.

Specific to in-state residents, this graduate degree program is affordable for that target group. I would envision this being an important marketing point, as well.

Further, I would include language that specifically describes this graduate program operating in a cohort model for students. I view the cohort model as a strength, for so many reasons, including the bonding with peers, group work, etc. This language would also help to keep organized financial and human resources that you expect to utilize over the two-year course for each cohort of the graduate program. When the time to degree is left open-ended, this can create budget and capital issues.

Also, is there a certain period of time for which Masters' students can complete a Master degree? For example, at the University of New Hampshire, Master students have 6 years to complete a Master degree. You may want to include any specific time limitations placed on the degree for students.

Lastly, related to the above point, I would recommend defining what part-time status means from the student perspective. Does this mean being registered for a certain number of credits? You may also want to consider clarifying the Anticipated Headcount Enrollment table in Section 2.3, Program Description, Purposes, and Planning to illustrate your expectation of 25 students per cohort. Also, the question of what contingencies exist if your anticipated enrollments are not met is not addressed in the proposal.

10. What are the prospects that recruitment efforts and admissions criteria will supply a sufficient pool of highly qualified applicants and enrollees?

Pool of applicants

The authors state that they expect students at Binghamton University to be interested in this new graduate program. Participation in college fairs and visiting other colleges and universities comprise the types of activities that will be used to attract quality students. In addition, the affordability of a Binghamton University education will also help to attract applicants.

Recommendation: Considering the faculty enthusiasm for the MPH Program, I would expect students in these respective disciplines to be equally enthusiastic. In addition, the elevated GPA required for admission to Binghamton University assures, to the extent possible, that there is a highly qualified applicant pool existing on campus.

With respect to admission criteria, I would recommend that a specific lower limit be identified and communicated to potential applicants for the quantitative and writing components of the GRE.

The proposal of a rotating Admissions Committee comprised of faculty from the various departments is a great idea as it encourages further buy-in from the faculty and allows them to feel connected with the students. This Admissions Committee may want to consider conducting interviews, either in person or via Skype or Zoom, to personally speak with each applicant. I acknowledge this is a time consuming process but there is significant value in speaking with potential applicants to help with the evaluation process.

The Admissions Committee may also want to consider asking several essay questions in addition to, or in place of, the personal statement. In the University of New Hampshire MPH Program, we ask 5 specific essay questions of our applicants. We also require 3 letters of recommendation and I would recommend that the Binghamton MPH Program consider requiring 3 letters of recommendation rather than 2 letters of recommendation as it provides more information upon which to make a decision.

Lastly, the development of a Public Health Interest student group on campus would help to raise awareness of public health as an area of study for potential applicants.

11. Comment on provisions for encouraging participation of **persons from underrepresented groups**. Is there adequate attention to the needs of part-time, minority, or disadvantaged students?

### **Underrepresented groups**

The Graduate School regularly recruits applicants from historically underrepresented groups by attending recruitment fairs at colleges and universities that are aimed at minority students. Currently, 36% of undergraduate students attending Binghamton University come from underrepresented groups. Furthermore, many undergraduate students are first-generation college students and first-generation speakers of English.

The Graduate School also follows an active recruiting schedule by attending over 90 college fairs per year.

Recommendation: It seems that the University, as a whole, is attentive to assuring that they recruit students from underrepresented groups as part of their working business plan. There is no reason to believe that this approach would not continue for the new MPH Program.

The MPH Program is intended to be completed on a full-time basis. What would your contingency plan be for a student who needs to take a medical leave of absence? You may want to consider including a statement about special circumstances given the cohort nature of the MPH Program.

12. Assess the system for monitoring students' progress and performance and for advising students regarding academic and career matters.

Students' Progress, Performance, and Advising

The Admissions Committee "will also serve as advisors to students, providing information, resolving problems, and helping students with academic questions." The MPH Program Director will monitor the students' academic progress through the curriculum and will connect students experiencing difficulty to tutoring assistance. Students are expected to maintain a 3.0 GPA, in order to be eligible to participate in their practicum. The MPH Program Director and Assistant Program Director will oversee the practicum placements and student performance.

Recommendation: I would refer the reader to the Evaluation narrative in Question 1, in which I present several ideas on how to monitor student's progress and performance through the MPH Program. Another recommendation I have, considering the potential for a multi-cultural student body with little to no professional work experience, is to require participation in a professional development workshop that addresses proper workplace behavior and dress, etiquette, acceptable communication means, including the use of social media in the workplace. This could be a requirement, in addition to the 3.0 GPA, that must be completed prior to being eligible to registering for the practicum.

With respect to advising, you may consider making this a duty of the Assistant Program Director, for several reasons. First, having one proficient person offer advising services helps with assuring consistent messaging and reduces the possibility for miscommunication among the MPH students. Second, do the faculty who will comprise the Admissions Committee already have advising responsibilities to the students in their home department? This centralizing approach could reduce the workload burden for these faculty who will already be providing a service in reviewing applications and potentially interviewing prospective students.

It is also not clear how a student will be advised on which foci (i.e., global health or population health) to study. You may consider including language on how the Assistant Program Director may assist the students with this aspect of the MPH Program.

13. Discuss prospects for graduates' post-completion success, whether employment, job advancement, future study, or other outcomes related to the program's goals.

**Program Goals** 

The authors state that the MPH graduates, through independent and team-based classroom and experiential learning opportunities, will be able to find employment or engage in further study.

Binghamton University also has the Fleishman Center for Career and Professional Development which helps students in resume development, interviewing skills, and identifying research career opportunities. In addition, MPH students can participate in the Graduate Community of Scholars which helps students prepare for the job market.

Recommendation: I believe this proposed MPH Program has the potential to help develop graduates who are successful in whether they select to pursue employment, advancement in a current position, or future graduate work. I would recommend that the proposal be strengthened in this area. Related to this point, please see my recommendations for the Need/Demand for this graduate Program in Question 1, specifically my comments pertaining to employment opportunities for MPH Program graduates.

As I previously mentioned, the potential for joint degree programming is strong for this graduate program.

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For example, developing joint degree between the MSW-MPH, RN-MPH, Spanish-MPH, etc. is a significant possibility once the generalist program is fully functioning. I would recommend that the MPH Program administration also consider the potential for the MPH Program to feed into doctoral programs already in existence on the Binghamton University campus. For example, the MPH Program could feed into the doctoral program in Community and Public Affairs. Similarly, there may be some doctoral students who would pursue a MPH degree simultaneously (if this is allowed by Binghamton University; this is currently not allowed at the University of New Hampshire), or immediately following the completion of their doctoral work.

Lastly, the development of an MPH Alumni Association would help fellow graduates stay in touch with each other, serve as possible preceptors in the future; and serve as a resource for employment opportunities based on their success in the field. An annual Alumni Awards event could also be established to recognize the accomplishments of alumni of the MPH Program.

### **IV. Resources**

14. Comment on the adequacy of physical resources and facilities, e.g., library, computer, and laboratory facilities; practica and internship sites or other experiential learning opportunities, such as co-ops or service learning; and support services for the program, including use of resources outside the institution.

### **Resources and Facilities**

While on campus, we visited the resources and facilities that would be available to the MPH students. We also learned about the development of the new School of Pharmacy and the Health and Science Technology Park in Johnson City. The proposal also contains letters of support by various organizations that could host one or more students for their practicum experience. In addition to the Fleishman Center for Career and Professional Development, there is also an office to assist students with service learning opportunities.

*Recommendation*: The tour of the campus resources and facilities assured that there is sufficient amenities, with respect to computer lab access, technology enhanced classrooms, library materials, individual study space, and space to accommodate team meetings and workspace for group projects.

In addition, the faculty and administrators who comprise the MPH Program are well-connected with community organizations and these are important partnerships that should continue to be nurtured for the reasons previously stated in this report.

Furthermore, the growth of the Health and Science Technology Park in Johnson City should help to establish interprofessional education opportunities, which although not currently required by CEPH, could help to set the Binghamton MPH Program apart from others in the area and the region. I have no concerns about the availability of resources and facilities for the graduate students who would attend this MPH Program.

15. What is the institution's commitment to the program as demonstrated by the operating budget, faculty salaries, the number of faculty lines relative to student numbers and workload, and discussions about administrative support with faculty and administrators?

### Institutional commitment

It was evident during our campus visit and discussions with the faculty and administration involved in the development of this MPH Program that they are committed to developing a graduate program that will contribute to mitigating the public health issues facing the community, the state, region, nation, and the world. The operating budget seems appropriate and the administration was receptive to comments about increasing the MPH Program Director's salary and allowing this person to be able to make 2-3 faculty hires.

*Comment*: Following my campus visit and meetings with the faculty and University leadership, I have no concerns about Binghamton University's commitment to the success of this graduate program and their intent to develop a prominent public health program whose graduates will contribute to making populations around the world healthier.

When President Stenger and Provost Nieman were asked for their long-term vision for the MPH Program, they expressed that they wanted the MPH Program to be nationally recognized in 5-10 years for some unique aspect (e.g., global health, transdisciplinary approach, contributions from the liberal arts and sciences) with the ultimate goal to develop a School of Public Health. Following my review of this proposed MPH Program, I would concur that this vision is within reach for Binghamton University.

## V. Summary Comments and Additional Observations

16. Summarize the major strengths and weaknesses of the program as proposed with particular attention to feasibility of implementation and appropriateness of objectives for the degree offered.

## **Strengths**

- MPH Program supports the mission, vision, and strategic plan for Binghamton University
- MPH Program housed in the Graduate School
- Transdisciplinary approach
- Committed faculty and administrative leadership
- Sufficient resources and facilities on the Binghamton University campus for individual and group work for students
- New Health Science and Technology Center in Johnson City
- Established relationships with community stakeholders who can offer practicum placements and can serve on the MPH Advisory Council
- Practice and research opportunities
- Joint programming possibilities (e.g., MSW-MPH, RN-MPH, Spanish-MPH, etc.)
- Opportunity to develop 3+2 and/or 4+1 graduate programming
- Graduate certificate development (Geographic Information Systems, Emergency Preparedness, Analytics)
- Interprofessional education opportunities (collaborate with the School of Pharmacy; Health Outcomes Program)
- Undergraduate programs on campus can serve as pool of potential applicants
- Transdisciplinary Areas of Excellence (generated intensive collaboration across disciplinary lines)
- Experiential and service learning opportunities
- Generalist MPH curriculum allows for flexibility with elective courses; capitalizes on faculty expertise
- Balance of practical and applied courses
- Plans for a professional development program for faculty, students, and stakeholders
- Reasonable tuition rate
- Marketing department to brand the MPH Program
- Public health program is the most searched graduate program at Binghamton University
- Developed with the Council on Education in Public Health's criteria in mind so the MPH Program will be well-positioned to seek accreditation after it graduates its first cohort of students
- Binghamton University is committed to expanding its graduate education program offerings
- Binghamton University is an important economic driver for the local community

#### Weaknesses

Please note that these identified weaknesses are not insurmountable and can be readily addressed by the leadership of the MPH Program.

- Needs assessment data should be provided to support the demand for the MPH Program and identify employment opportunities
- Delineate the practicum and capstone courses in the proposal
- Faculty buy-out model should be further explored with Department Chairs
- Report on the work of faculty that supports the development of the global health and population health foci

17. If applicable, particularly for graduate programs, comment on the ways that this program will make a unique contribution to the field, and its likelihood of achieving State, regional and/or national prominence.

Comment: This MPH Program has the potential to positively impact the field of public health by preparing public health professionals who, based in a research and practice-oriented education program, will be able to address public health issues locally, nationally, and abroad. The two emphasis areas for this MPH Program, global health and population health, are pertinent to the dynamic health care and public health landscapes. The students will receive training in the following skill areas: analysis, written and oral communication, critical thinking, data collection and interpretation, cultural competence, health promotion, systems thinking, innovative strategy development, application of practical skills, individual and group approaches to problem solving. This comprehensive approach to graduate public health education ensures a competent public health workforce who can be successful wherever they choose to work or if they choose to pursue further graduate training.

In addition, since the MPH Program is considering the criteria required for CEPH accreditation in its development, the MPH Program will be well-positioned to pursue accreditation upon graduation of its first cohort.

Lastly, the commitment from the excellent, qualified faculty and administrative leadership is evident and their vision to be known as a prominent graduate public health program that offers expertise in global health and population health is quite feasible.

**18.** Include any **further observations** important to the evaluation of this program proposal and provide any **recommendations** for the proposed program.

I would like to take this opportunity to thank Dean Strehle and Provost Nieman for their kind invitation to review the proposed MPH Program offered by Binghamton University. The commitment from the faculty and administrative leaders I had the opportunity to interact with, along with the campus tour which highlighted the ample resources and facilities available to deliver such an important graduate degree program, was evident during my visit. I have no additional observations or recommendations to include, in addition to those I already made in the narrative of this report.



# **External Reviewer Conflict of Interest Statement**

| I am pro | oviding an external review of the application submitted to the State University of New York by:  |
|----------|--|
|          | Binghamtm. University  |
|          | (Name of Institution or Applicant)   |
| The app  | plication is for (circle A or B below)   |
| A)       | New Degree Authority   |
| B)       | Registration of a new academic program by an existing institution of higher education:  (Title of Proposed Program)  |
|          | (Title of Frobused Frograms)   |
| I affirm | that I:  |
| 1.       | am not a present or former employee, student, member of the governing board, owner or shareholde of, or consultant to the institution that is seeking approval for the proposed program or the entity seeking approval for new degree authority, and that I did not consult on, or help to develop, the application: |
| 2.       | am not a spouse, parent, child, or sibling of any of the individuals listed above;   |
| 3.       | am not seeking or being sought for employment or other relationship with the institution/entity submitting the application?  |
| 4.       | do not have now, nor have had in the past, a relationship with the institution/entity submitting the application that might compromise my objectivity.   |
| Name Por | of External Reviewer (please print):  SEMAY M. CARM, PhD, MPH  Ture:  Sumary M. CAIM   |
|          | <b>/</b>   |

# **External Evaluation Report**



Form 2D
Version 201-08-02

The External Evaluation Report is an important component of a new academic program proposal. The external evaluator's task is to examine the program proposal and related materials, visit the campus to discuss the proposal with faculty and review related instructional resources and facilities, respond to the questions in this Report form, and submit to the institution a <u>signed</u> report that speaks to the quality of, and need for, the proposed program. The report should aim for completeness, accuracy and objectivity.

The institution is expected to review each External Evaluation Report it receives, prepare a single institutional response to all reports, and, as appropriate, make changes to its program proposal and plan. Each separate External Evaluation Report and the Institutional Response become part of the full program proposal that the institution submits to SUNY for approval. If an external evaluation of the proposed program is required by the New York State Education Department (SED), SUNY includes the External Evaluation Reports and Institutional Response in the full proposal that it submits to SED for registration.

Institution: SUNY - Binghamton

Evaluator Name (Please print.): Resa M. Jones, MPH, PhD

**Evaluator Title and Institution:** Associate Professor, Virginia Commonwealth University

Evaluator Signature:

Proposed Program Title: SUNY – Binghamton Master of Public Health Program

Degree: Master of Public Health

Date of evaluation: October 12 – 14, 2016

I. Program

1. Assess the program's **purpose**, **structure**, **and requirements** as well as formal mechanisms for program **administration and evaluation**. Address the program's academic rigor and intellectual coherence.

Purpose: The overall purpose of the proposed Master of Public Health (MPH) program could be clarified and strengthened by concretely describing the void the program would fill and how it is unique to the SUNY system, which would include data to support claims. In addition, how the program fits into the SUNY-Binghamton mission and strategic plan should be more fully developed. During site visit conversations, examples were given; however, this information is not included in the written proposal document. In addition, providing data and/or evidence to support claims would be appropriate.

Structure: Given the proposed program is being created using a collaborative approach with faculty in various Schools, Departments, and programs, the current structure with the program being housed within the Graduate School is appropriate. While there may be ideas about moving the program to a different school once it is developed, the leadership is cautioned against this as it could likely create silos that currently do not exist. Specifically, the program will be most successful if it is kept in the Graduate School until a time if/when a School of Public Health is created. This will promote integration and

reduce competing demands/needs from individual Schools, Departments, and/or programs. Finally, a total of ~20-25 students per cohort (for a total of 50 students) is a reasonable 5-year goal.

Requirements: While the faculty expertise is aligned with focus areas of Global Health and Population Health, official MPH tracks or "Concentrations" in Global Health and Population Health should be reconsidered to ensure that the proposed program has an appropriate student-to-faculty ratio (SFR) as required by the accrediting body, the Council on Education for Public Health (CEPH). The current faculty size does not support "Concentrations"; however, a generalist track could be created to give students the ability to focus their studies on either global health or population health. If this were done, the 3 courses per each of the currently proposed "Concentrations" would become the 3 "selectives" that the students take for their focus area (e.g., 3 Global Health selectives, 3 Population Health selectives).

Overall, the proposed program would benefit from a review of the national accrediting body, the CEPH Competencies and Requirements. The CEPH Competencies are being revised and are in the final period of public comment. Creating the proposed MPH Program so it is aligned with expectations, will serve it well when it pursues accreditation. The total number of "Core" courses is too large and does not allow for selectives or electives, which students need. Specifically, the number of "Core" courses should be reduced from 9 to ~5-6. Further, they should be aligned them with the new/revised CEPH competencies – including the mandate to work toward integration of Public Health disciplines within 1-2 Core courses. For example, this integration could be done by teaching Epidemiology and Biostatistics together in 1 course or a 2-course series or a team teaching approach using a case-based training with faculty from Epidemiology, Biostatistics, Environmental Health, Health Policy, and Health Behavior team-teaching 1 course. Examples of integrated courses and/or curriculum are available from Columbia University, University of South Florida, and Virginia Commonwealth University. In addition, the "Core" course titles and description prose need to be parallel on pages 4, 7 and Appendix C. Further, sufficient detail should be included so a reviewer is able to understand the intent of each course and what it entails.

With the reduction in "Core" courses, the program should increase the number of electives that are listed. During the site visit faculty suggested multiple courses they would be interested in teaching, which are not listed in the current document. Those with broadest appeal would be most appropriate. Students will want some flexibility and the ability to take classes that are well-suited for their training and career goals.

The proposed Practicum and Capstone need to be revisited so they meet CEPH requirements. Also, the program should enhance its experiential training and experiences and offer students applied experiences throughout the 2-year degree program.

In addition, per CEPH requirements and recommendations, there should be curriculum or degree requirements that sufficiently cover finances, diversity, and service learning. Also, professional development seminars on public health-related topics in research and practice should be offered on a regular basis that are appropriate for students and faculty.

Administration: Hiring a Program Director and Associate Director will be critical to the success of the program and its CEPH self-study report and site visit for accreditation. More information on administration is given in item 15 below.

Evaluation: The goal of seeking accreditation by CEPH will ensure the program completes a Self-Study report is appropriate. That said, the timeline for the accreditation may prove to be too aggressive to be reflective, engage public health stakeholders, and write the self-study report and prepare for the CEPH site visit. The timeline for CEPH accreditation should be selected given input from CEPH given expectations for new programs. Course rubrics need to be created so students know what is expected of them for each course and/or degree requirement. Additional information to enhance evaluation is provided in items 3 and 12 below.

2. Comment on the **special focus** of this program, if any, as it relates to the discipline.

In general the focus areas are appropriate for the field of public health; however, official "Concentrations" are a concern, which is covered in item 1 above as well as in item 5 below.

3. Comment on the plans and expectations for self-assessment and continuous improvement.

In preparation for the CEPH self-study and accreditation, the proposed MPH program will be required to complete a self-assessment. The currently proposed plans and expectations would be greatly enhanced by the following: 1) Creation of an MPH Assessment Committee with program faculty, a local public health practitioner, and at least one student would be appropriate. This group could create and/or provide guidance on assessment tools that could be used to track progress such as: student competency surveys (baseline and throughout program); end-of-semester course evaluations where students rate their level of competency for each competency mapped to the course syllabus; teaching effectiveness course evaluations; guidelines for what should be done if students are not progressing as expected or faculty are not receiving adequate teaching effective scores on multiple criteria; employer surveys to determine the skills and training that are necessary and whether graduate have the appropriate training; Practicum and Capstone rubrics and evaluation forms; etc. 2) Curriculum Committee to approve and monitor courses and mapping of Competencies to course syllabi, 3) Creation of a Steering Committee or Advisory Council of public health officials, public health stakeholders, employers, and key community stakeholders in the area that the SUNY-Binghamton MPH program would consider the area it is serving. The group would not be restricted to health and public health employees/employers. Finally, the program could also consider observed, peer teaching reviews particularly for junior faculty who have less teaching experience.

**4.** Discuss **the relationship** of this program to other programs of the institution and collaboration with other institutions, and assess available support from related programs.

The MPH program faculty will come from various Schools and Departments at SUNY-Binghamton. Faculty and Deans are clearly enthused from site visit meeting; however, no Department Chairs were included on the site visit itinerary; thus, it is difficult know whether Chairs understand the commitment of their faculty that is needed and the support that is critical for the success of this collaborative degree program. In addition, the relationship with local public health for Practicum sites and possible Capstone Project opportunities as well as other applied training experiences will be important to the success of the program.

During the site visit faculty talked at length about applied experiences students could take advantage of through their funded and unfunded research (e.g., global internship, research assistant on projects, etc.).

**5.** What is the evidence of **need** and **demand** for the program locally, in the State, and in the field at large? What is the extent of occupational demand for graduates? What is the evidence that demand will continue?

Statements are made to suggest the need and demand of the proposed program; however, sufficient data are not included to support claims within the proposal. During the site visit we heard several specific examples (with evidence/data) of the area's public health needs, which are not in the proposal document. In addition, we learned during the site visit that "public health" is the most popular search on the SUNY-Binghamton web site for courses/degrees that are not currently offered. More granular data to support general statements are needed throughout the proposal. Data on likely employers and how many staff they hire annually at various levels including local, regional, and state public health are necessary. In addition, employment projections from local and NY state public health employers as well as national trends should be included.

#### II. Faculty

**6. Evaluate the faculty**, individually and collectively, with regard to training, experience, research and publication, professional service, and recognition in the field.

Training and experience of proposed faculty are appropriate; however, CVs and information on research, publications, professional service and recognition in the field were not provided to reviewers. From a review of faculty web pages, the faculty appear to be well-suited to creating a successful MPH program.

7. Assess the faculty in terms of number and qualifications and plans for future staffing. Evaluate faculty responsibilities for the proposed program, taking into account their other institutional and programmatic commitments. Evaluate faculty activity in generating funds for research, training, facilities, equipment, etc. Discuss any critical gaps and plans for addressing them.

The number and qualifications of each faculty appear to be appropriate overall as long as the proposed program is a generalist program and does not have "Concentrations". (See note about SFR in item 1 above.) The total FTE of each faculty should be revised to reflect the percent effort that will be devoted to MPH program courses. For example, faculty are listed at 100%; however, they have teaching responsibilities in other Schools and Departments; thus, they cannot be 100% FTE for the MPH program. The total number of faculty need to be appropriate given CEPH requirements (3.5 FTE) per Concentration. It is unclear whether there actually are 3.5 FTE once the FTE are listed to accurately reflect the percent effort that each faculty would contribute specifically to the MPH program given their other commitments.

No information was provided to facilitate evaluation of faculty activity in generating funds.

Given the collaborative nature of the program, the fact that various faculty are listed as being able to teach the same course is useful. That said, a plan for selecting and negotiating which faculty teaches which course(s) in a given semester/year is not detailed, which could present issues given competing demands from each faculty member's respective School and/or Department.

**8.** Evaluate credentials and involvement of **adjunct faculty** and **support personnel**.

It is unclear whether the part-time faculty listed in the SUNY Faculty Table are actually part-time SUNY faculty or adjunct faculty. Given the fact that SUNY is not the employer for at least 2 of the 4 part-time faculty, it would appear they are adjunct. In general, the program should rely on Core full-time faculty and limit the number of adjunct faculty particularly those who are teaching Core courses.

The program aims to hire an Associate Director and Secretary who will both serve as support personnel. Support staff roles should be clarified particularly since this program is a collaborative with faculty coming from various Schools and Departments. Support for the MPH program should come from the MPH program staff and not staff in other Schools and/or Departments unless there is a formal agreement.

#### III. Students

**9.** Comment on the **student population the program seeks to serve**, and assess plans and projections for student recruitment and enrollment.

More information should be provided to clarify the student population the proposed program aims to serve. For example, text is included to suggest that 97 out of 100 current public health practitioners in the Binghamton area do not have a MPH degree; however, no evidence is provided to suggest that any of these 97 individuals will apply to the program. In addition, current undergraduate students are mentioned as a target for recruitment; however, no plans or target groups are provided for these efforts. For example, outreach efforts could be done with majors that would likely feed into a MPH program (e.g., biology, sociology, nursing, social work) and special interest groups (e.g., pre-med). Overall, data should be provided to support the enrollment projections and interest from students. For example, a feasibility study would provide evidence about student enrollment, student interest in focus areas, student goals for employment, etc.

10. What are the prospects that recruitment efforts and admissions criteria will supply a sufficient pool of highly qualified applicants and enrollees?

The current admissions criteria may not yield the highest quality students. Students who struggle with quantitative analyses often have a difficult time with required epidemiology and biostatistics coursework. Thus, the admissions criteria should include an assessment of a combination of each applicant's undergraduate GPA in quantitative courses and the quantitative GRE score. In addition, the program should consider having a minimum requirement on the written portion of the GRE. Finally, the program needs a more fully developed plan to ensure diversity.

**11.** Comment on provisions for encouraging participation of **persons from underrepresented groups**. Is there adequate attention to the needs of part-time, minority, or disadvantaged students?

The program needs a more fully developed plan to ensure diversity from underrepresented groups. In addition, there is little or no discussion of the needs of part-time, minority, or disadvantaged students.

**12.** Assess the system for monitoring **students' progress and performance** and for **advising students** regarding academic and career matters.

As mentioned in item 3 above, monitoring student progress and performance could be improved via students' self-assessment of competencies (baseline and throughout program). In addition, more information is needed for what constitutes satisfactory progress toward degree completion and the procedures that are in place if a student is not progressing. The program may want to consider a bi-annual review of each student with faculty feedback that results in an advising letter for each student. In addition, while the Fleishman Center for Career and Professional Development is listed as a resource for students, the center for International Students is not listed as a resources within the proposal. Also, the proposal

states that the Director will advise all students, which is feasible for academic advising and feedback on courses. However, that plan is not feasible if adequate time is spent with each of 50 students regarding career and professional development matters. Matching each student with an advisor who is most closely aligned with their career interests will best serve each student.

13. Discuss prospects for graduates' post-completion success, whether employment, job advancement, future study, or other outcomes related to the program's goals.

In general, public health practitioners and researchers are needed in the U.S. Further, global health and population health are both important topics in public health. That said, while the proposal provides some information about potential employers, data on how many staff they hire annually at various levels including local, regional, and state public health are missing. In addition, employment projections from local and NY state public health employers as well as local universities and specific health-related institutions/facilities should be added. Further, national trends for employment and growth in global health and population health should be included. Also, projections for percent of graduates with public health job within 6-months and/or 1-year of degree completion should be included. In addition, data on job advancement or evidence from personal communications with local and state public health should be provided.

#### IV. Resources

**14.** Comment on the adequacy of physical **resources** and **facilities**, e.g., library, computer, and laboratory facilities; practica and internship sites or other experiential learning opportunities, such as co-ops or service learning; and support services for the program, including use of resources outside the institution.

This reviewer expected more detailed information about the physical space for the MPH program in terms of: number and size of classrooms; number and size of computer lab; available statistical and word processing software; size of space for students' group work and study space; and number of health-related journals/resources and online access to materials/literature. In addition to letters of support, more information about the resources and setting for practicums and experiential training should be included in the proposal. Also, the SUNY-Binghamton resources for service learning are not included.

**15.** What is the **institution's commitment** to the program as demonstrated by the operating budget, faculty salaries, the number of faculty lines relative to student numbers and workload, and discussions about administrative support with faculty and administrators?

Given the site visit, the commitment of the President, Provost, and Deans working to develop this program is clear. Funding and budget allocation will likely need to increase to facilitate success.

For example, the proposed salary for the Director is too low for the type of person that should be hired and their role and responsibilities. People in this type of position should have an administrative supplement. Further, the amount of time that will be needed to create and oversee a Self-Study committee, help with the creation of new courses to meet CEPH expectations, establish a Curriculum Committee, map all the curriculum to competencies, establish an Assessment Committee, develop rubrics for all degree requirements, create an Advisory/Steering Committee, and write a sufficient CEPH Self-Study Report cannot be underestimated. It could easily be a 12-month, full-time job and should be funded as such. So for person who has the ability to do this work independently while maintaining their

own research – the salary should be increased. Also, to be attractive, the ability to hire not only the Associate Director, but also 2-3 additional faculty is appropriate given the goal of 50 students per year.

Additional funds are also necessary to budget for student travel to local/regional (possibly national conferences) as well as regular public health seminars held at SUNY-Binghamton, which serve as professional development opportunities for students, faculty, and local public health stakeholders. In addition, the program will be required by CEPH to give back to the local public health community, which will necessitate continuing education or professional development seminars and workshops based on the needs that those stakeholders identify.

Also, as mentioned in item 7 above, a plan for selecting and negotiating which faculty teaches which course(s) in a given semester/year should be detailed to ensure that anticipated issues around effort and competing demands from each faculty member's respective School and/or Department are proactively and uniformly addressed.

# V. Summary Comments and Additional Observations

**16.** Summarize the **major strengths and weaknesses** of the program as proposed with particular attention to feasibility of implementation and appropriateness of objectives for the degree offered.

The major strengths of the program:

- Fills a need in public health training and could provide experiential training opportunities that would be unique to the program (albeit it data and evidence need to be added to the proposal to support the claims)
- Builds on the excellent training and expertise of current SUNY-Binghamton faculty
- Capitalizes on a collaborative model involving faculty from various Schools and Departments
- Involves local public health practitioners in training program
- Has strong support from SUNY-Binghamton leadership

The major weaknesses of the program:

- The proposed program courses, requirements, and competencies do not fully align with various CEPH requirements, which are detailed throughout this external evaluation report.
  - o The number of Core courses should be reduced.
  - o A generalist program with focus areas rather than Concentrations should be considered.
  - o Curriculum that integrates various public health disciplines into 1 or 2 courses should be pursued.
  - o Ensuring that the Practicum and Capstone meet CEPH requirements is necessary.
- The proposal does not include the salient data and evidence that were provided verbally during the site visits; thus, it is not as strong as it could be.
- Assessment plans for the program as well as its students should be enhanced.
- The proposed faculty needed for the program may be too low given no faculty are able to be 100% in the MPH program and also continue teaching, research, and service in their primary Schools and Departments.
- The budget needs to be increased to cover administrative leadership, additional faculty for an adequate student-to-faculty ratio, and necessary professional development and outreach activities.
- The proposal does not highlight the unique Practicum and applied opportunities students will be able to participate in (e.g., global internships, working on research with faculty, etc.)
- **17.** If applicable, particularly for graduate programs, comment on the ways that this program will make a **unique contribution** to the field, and its likelihood of achieving State, regional and/or national **prominence**.

Information we received verbally during multiple meetings with leadership and faculty at the site visit provided evidence that the proposed program could make a unique contribution in areas of global health and population health; however, this useful and convincing information was not necessarily included in the written proposal. Thus, adding details and examples to illustrate claims and highlight the opportunities for students and how the proposed training and available opportunities are completely different than the training of current programs in NY, the region and the country is critical.

**18.** Include any **further observations** important to the evaluation of this program proposal and provide any **recommendations** for the proposed program.

No additional comments or recommendations.



#### **External Reviewer Conflict of Interest Statement**

I am providing an external review of the application submitted to the State University of New York by:

# Dean Susan Strehle, SUNY - Binghamton

(Name of Institution or Applicant)

The application is for (circle A **or** B below)

A) New Degree Authority



Registration of a new academic program by an existing institution of higher education:

# Master of Public Health (Title of Proposed Program)

I affirm that I:

- 1. am not a present or former employee, student, member of the governing board, owner or shareholder of, or consultant to the institution that is seeking approval for the proposed program or the entity seeking approval for new degree authority, and that I did not consult on, or help to develop, the application;
- 2. am not a spouse, parent, child, or sibling of any of the individuals listed above;

- 3. am not seeking or being sought for employment or other relationship with the institution/entity submitting the application?
- 4. do not have now, nor have had in the past, a relationship with the institution/entity submitting the application that might compromise my objectivity.

Name of External Reviewer (please print):

| Resa M     | . Jones, MPH, PhD |  |
|------------|-------------------|--|
| Signature: | Ben At. Ju        |  |

# Appendix G: Institutional Response to external evaluators' reports

We are grateful to Dr. Rosemary Caron and Dr. Resa Jones for their thorough and thoughtful reports on the proposal to establish a Public Health Program at Binghamton. They made important recommendations that we have used to revise and improve the proposal. The evaluators include a long list of strengths they identified in the program, and we are grateful and pleased that their visit enabled them to see these strengths.

In the section on "Weaknesses" at the end of the report, the evaluators identify only a few. First, they wanted more data to support the need and demand for the program. We have added needs assessment data and specific position demand projection data from the Bureau of Labor Statistics, as well as data about Binghamton students' interest in health-related coursework and careers.

At the evaluators' suggestion, we completed a survey of current juniors and seniors, without either marketing the program in advance or explaining to recipients what a "Master's in Public Health" would involve. The survey revealed that, of 8332 students who received the survey, 214 indicated an interest in a public health career and up to 255 said they are interested in learning about the core areas within an MPH curriculum. See Appendix H for the survey.

The evaluators also recommended that we clarify the practicum and capstone courses in the proposal. We designed and added a series of one credit courses to add practical training in each semester and to fulfill particular needs: the first will include professional development and socialization; the second will emphasize epidemiological methods of inquiry and their application to specific, real world health issues and culminate in a report to a formal board; the third will emphasize advocacy and enable students to write a policy brief, present it to an appropriate group, identify bills on the subject before legislative bodies, and advocate for public health needs. The final practicum and capstone will require at least 100 hours of internship experience; students will work in teams on a project for the sponsoring agency and present their findings to the board at the end of the semester. In clarifying the final practicum and capstone, we developed two different versions of student learning outcomes, one designed to fulfill the needs of global health (with a practicum overseas in many cases) and the other designed to fulfill the needs of population health (with practica sites that can be domestic or international). At the evaluators' suggestion, we added some detail about the rich and unique practicum experiences that will be available to students.

The evaluators recommend that the faculty buy-out model should be further explored. Provost Nieman has met with each of the Deans whose faculty will contribute to the program, and the budget contains both entire-faculty buyout projections for 2 faculty members and one-course-faculty-buy-out projections for other faculty. These numbers make the buy-outs acceptable to the Deans and the

chairs whose faculty have been listed as participants in the program. Their percentage-time contributions have been revised to indicate more clearly the expectations for the teaching they will contribute.

The evaluators suggest that we clarify the reason why we chose global and population areas to be the foci of the program. We chose global health on the basis of faculty expertise and interest, as well as Binghamton's success as a preferred destination for international students. We chose population health on the basis of faculty expertise and interest, as well as the increasing importance of statistical analysis in determining health measures. We have added this in answering the question about how faculty were involved in the program design.

The evaluators also said they wanted more detail about the faculty supporting the two foci. Each of the full-time faculty has an impressive CV, and these are (as SUNY asks) readily available on request. There are senior, eminent full professors whose entire careers have been devoted to public health (Serdar Atav, Ralph Garruto, Gary James, Leo Wilton); associate professors leading campus initiatives in various aspects of public health (Vicky Rizzo, Titilayo Okoror, Yvonne Johnston, Suk-Young Kang, David Merriwether); and there are assistant professors doing innovative and important work in the field (Sanjeena Dang, Louisa Holmes, Katherine Wander). We didn't deliver CVs to the outside evaluators, though they met the faculty; but we would be delighted to supply them.

The two evaluation reports are long and detailed; our response here will identify <u>changes</u> we have made in response to their reports, <u>clarifications</u> of the proposal to strengthen it, and <u>plans</u> we will continue to make to achieve accreditation from CEPH in the future.

# **Changes**

The most important changes we made to the proposal altered the curriculum. Our original proposal offered concentrations in global and population health, but the outside evaluators recommended that we revise these to constitute focus areas within a single generalist MPH program. They recommended that we decrease 9 core courses to 5 or 6, and that we add electives to enable more flexibility. We altered the plan to accept and include all of these recommendations.

The evaluators recommended that we integrate learning across courses more fully and clearly, and as an example they suggested an Applied Epidemiology course, using biostatistics, in place of our draft version of Epidemiology II. We altered the plan to emphasize the applied and integrative nature of this course, which will draw together students' learning in all 5 core areas of public health in a case-study approach to a particular public health challenge.

In these important ways, we have changed the curriculum to enable the program to attain accreditation faster and serve students better.

## Clarifications

The evaluators found many strengths in the proposal and the planning, and they make several suggestions in their reports designed to help us clarify our intentions and procedures. We have taken many of these recommendations too.

They recommend that we re-review CEPH competencies so we can build in areas for which students will be assessed. One example is finance; we re-titled PH 522 to make clear that the study of "health policy and management" (our former title) will also include the study of finance.

The evaluators suggested that the ad for the Director's position be clarified to ask for prior CEPH accreditation experience, and we have revised the ad, which is now posted. We also increased the salary expectations for the position, at their suggestion, and built a higher number into the projected budget for the program.

The evaluators recommend that we add to the need/demand section of the report, and we have done so. They underscore the importance of community stakeholders; we have reached out to several agencies, county health departments, and other community partners. See Appendix A for examples. We added numerical data to this part of the proposal to clarify the needs in New York and beyond.

They recommended that we clarify the intended student audience and note that we intend to use a cohort model. We have done so and clarified time-to-degree expectations on page 10. They suggest that we add interviews and an expectation for success in quantitative coursework and GREs to the admissions procedures, and we have done so.

They asked for additional information about the space, computing and software resources, and classrooms for the program, and we have done so. They advised that we add more support for and detail about student advising to the plan, more program assessment detail, more targeted planning for diversity recruitment, and more detail about undergraduates' interest in health fields. We added all of the information to the proposal.

## **Plans**

The evaluators make several important and helpful suggestions for the future of the program, including its accreditation by CEPH and its successful transition into an ongoing contributor to public health. In most of these cases, their valuable advice will shape the program as it evolves and help the Director, who will join the Binghamton faculty in fall 2017, to build well. In many cases, the recommendations refer to future states of the program and can be accepted but not implemented now.

These suggestions include:

- Avoiding donor fatigue by developing and helping community partners
- Adding professional development for program stakeholders and others
- Developing joint degrees with other programs on campus
- Developing statements of mission, vision and plans once the Director arrives
- Establishing committees to oversee the work of the program, including a Curriculum Committee, an Assessment Committee, and Advisory Council
- Checking in with employers of graduates
- Joining appropriate professional organizations
- Adding more assessments of the program once it is established
- Exploring partnerships with other programs on campus
- Adding an advisory board of community stakeholders
- Holding meetings with teaching faculty
- Systematizing personnel expectations with faculty teaching between department & MPH
- Insure that 6 core courses are not cross-listed between MPH and others
- Invite practitioners of public health to guest lecture
- Centralize advising under the Assistant Program Director
- Develop an Alumni Association for graduates

We are grateful to the evaluators for all of their suggestions and recommendations, and we believe we have developed a stronger proposal as a result of their visit.

#### Are you interested in pursuing a master's in any field after you graduate?

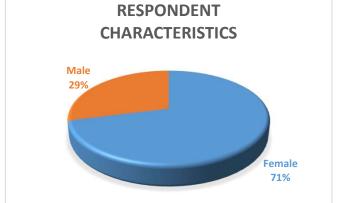
|       |       | Frequency | Percent | Valid Percent | Percent |
|-------|-------|-----------|---------|---------------|---------|
| Valid | Yes   | 276       | 75.4    | 75.4          | 75.4    |
|       | Maybe | 81        | 22.1    | 22.1          | 97.5    |
|       | No    | 9         | 2.5     | 2.5           | 100.0   |
|       | Total | 366       | 100.0   | 100.0         |         |

# **Appendix H**

The survey was sent to all juniors and seniors, or a total of 8,332 total students.

Are you interested in exploring a career in the area of public health?

|       |       | Frequency | Percent | Valid Percent | Percent |
|-------|-------|-----------|---------|---------------|---------|
| Valid | Yes   | 214       | 58.5    | 58.5          | 58.5    |
|       | Maybe | 110       | 30.1    | 30.1          | 88.5    |
|       | No    | 42        | 11.5    | 11.5          | 100.0   |
|       | Total | 366       | 100.0   | 100.0         |         |



Are you interested in a Master's of Public Health degree at Binghamton University?

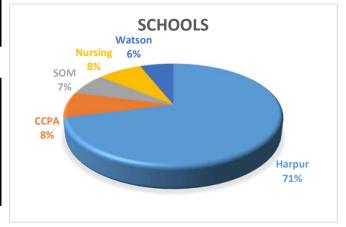
|       |       | Frequency | Percent | Valid Percent | Percent |
|-------|-------|-----------|---------|---------------|---------|
| Valid | Yes   | 171       | 46.7    | 46.7          | 46.7    |
|       | Maybe | 138       | 37.7    | 37.7          | 84.4    |
|       | No    | 57        | 15.6    | 15.6          | 100.0   |
|       | Total | 366       | 100.0   | 100.0         |         |

Are you interested in learning about (please check all that apply):-The scientific and

|         | eth    | ical foundations | s of public hea | th?           |         |
|---------|--------|------------------|-----------------|---------------|---------|
|         |        | Frequency        | Percent         | Valid Percent | Percent |
| Valid   | Yes    | 223              | 60.9            | 78.0          | 78.0    |
|         | Maybe  | 51               | 13.9            | 17.8          | 95.8    |
|         | No     | 12               | 3.3             | 4.2           | 100.0   |
|         | Total  | 286              | 78.1            | 100.0         |         |
| Missing | System | 80               | 21.9            |               |         |
| Total   |        | 366              | 100.0           |               |         |

Are you interested in learning about (please check all that apply):-Social and behavioral

|         | sources of public health problems? |           |         |               |         |  |
|---------|------------------------------------|-----------|---------|---------------|---------|--|
|         |                                    | Frequency | Percent | Valid Percent | Percent |  |
| Valid   | Yes                                | 244       | 66.7    | 86.2          | 86.2    |  |
|         | Maybe                              | 30        | 8.2     | 10.6          | 96.8    |  |
|         | No                                 | 9         | 2.5     | 3.2           | 100.0   |  |
|         | Total                              | 283       | 77.3    | 100.0         |         |  |
| Missing | System                             | 83        | 22.7    |               |         |  |
| Total   |                                    | 366       | 100.0   |               |         |  |



Are you interested in learning about (please check all that apply):-Distribution and

|         | determinants of disease in populations? |           |         |               |         |  |
|---------|---|-----------|---------|---------------|---------|--|
|         |   | Frequency | Percent | Valid Percent | Percent |  |
| Valid   | Yes                                     | 222       | 60.7    | 78.7          | 78.7    |  |
|         | Maybe                                   | 48        | 13.1    | 17.0          | 95.7    |  |
|         | No                                      | 12        | 3.3     | 4.3           | 100.0   |  |
|         | Total                                   | 282       | 77.0    | 100.0         |         |  |
| Missing | System                                  | 84        | 23.0    |               |         |  |
| Total   |   | 366       | 100.0   |               |         |  |

Are you interested in learning about (please check all that apply):-Strategies to improve

|         | in     | dividual and co | mmunity healt | h?            |         |
|---------|--------|-----------------|---------------|---------------|---------|
|         |        | Frequency       | Percent       | Valid Percent | Percent |
| Valid   | Yes    | 255             | 69.7          | 89.8          | 89.8    |
|         | Maybe  | 22              | 6.0           | 7.7           | 97.5    |
|         | No     | 7               | 1.9           | 2.5           | 100.0   |
|         | Total  | 284             | 77.6          | 100.0         |         |
| Missing | System | 82              | 22.4          |               |         |
| Total   |        | 366             | 100.0         |               |         |

Are you interested in learning about (please check all that apply):-Statistical analysis of public health data?

| Dublic ne | aitii uata : |
|-----------|--------------|
| Frequency | Percer       |

|         |        | Frequency | Percent | Valid Percent | Percent |
|---------|--------|-----------|---------|---------------|---------|
| Valid   | Yes    | 166       | 45.4    | 59.3          | 59.3    |
|         | Maybe  | 70        | 19.1    | 25.0          | 84.3    |
|         | No     | 44        | 12.0    | 15.7          | 100.0   |
|         | Total  | 280       | 76.5    | 100.0         |         |
| Missing | System | 86        | 23.5    |               |         |
| Total   |        | 366       | 100.0   |               |         |

Are you interested in learning about (please check all that apply):-How the environment

| Ale you iii | impacts health and disease? |           |         |               |         |  |  |  |
|-------------|-----------------------------|-----------|---------|---------------|---------|--|--|--|
|             |                             | Frequency | Percent | Valid Percent | Percent |  |  |  |
| Valid       | Yes                         | 231       | 63.1    | 81.3          | 81.3    |  |  |  |
|             | Maybe                       | 42        | 11.5    | 14.8          | 96.1    |  |  |  |
|             | No                          | 11        | 3.0     | 3.9           | 100.0   |  |  |  |
|             | Total                       | 284       | 77.6    | 100.0         |         |  |  |  |
| Missing     | System                      | 82        | 22.4    |               |         |  |  |  |
| Total       |                             | 366       | 100.0   |               |         |  |  |  |

Are you interested in learning about (please check all that apply):-How public policies

| can | impact | public | health? |
|-----|--------|--------|---------|
|     |        |        |         |
|     |        |        |         |

|         |        | Frequency | Percent | Valid Percent | Percent |
|---------|--------|-----------|---------|---------------|---------|
| Valid   | Yes    | 221       | 60.4    | 77.8          | 77.8    |
|         | Maybe  | 47        | 12.8    | 16.5          | 94.4    |
|         | No     | 16        | 4.4     | 5.6           | 100.0   |
|         | Total  | 284       | 77.6    | 100.0         |         |
| Missing | System | 82        | 22.4    |               |         |
| Total   |        | 366       | 100.0   |               |         |