

College of Health and Human Sciences

School of Health Studies

Public Health

Bachelor's of Science in Public Health

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# Part I: Assessment Plan

## 1. Introduction

The public health program prepares students for professional positions in health administration, health promotion, environmental health and general public health. Depending on their particular interests, graduates will be involved in planning and managing health service programs and facilities, developing and communicating health information to the public, and investigating and evaluating specific community and environmental health problems. Public Health majors choose one of four different emphasis areas: 1. general public health 2. health administration 3. environment and health, and 4. health promotion. General Public Health provides a broad foundation in public health, while you also pursue a minor outside the program. Health Administration focuses on interpersonal and analytical skills, as well as business and health knowledge necessary for work as a healthcare or public health professional. Environment and Health provides a strong background in biological and physical sciences and the ability to analyze complex situations. It helps prepare students to take positions as sanitarians, which are much in demand. Health Promotion focuses on communication skills and specialized training in techniques to promote healthy lifestyles, policies and environmental changes. This emphasis prepares you for work as a community health educator. Practical field training is also required as part of the public health curriculum. Alumni from the program work and pursue careers in hospitals, health care management organizations, local and state health departments, nursing homes, health care accrediting agencies and non-profit organizations.

In fall 2013, the then-program coordinator wrote the assessment plan and status report for the BSPH program, based on five student learning outcomes (SLO) that had been developed in 2006-07. These were:

1. Be knowledgeable of the determinants of health and disease, the organization of the health care system, and the relationship of that system to the broader social, political, and economic environment.
2. Be able to assess public health needs, develop priorities, and design and implement solutions to public health problems.
3. Possess basic information-handling skills necessary to carry out typical public health functions in general public health or health administration.
4. Recognize the value of life-long learning, professional excellence, and community involvement regarding health-related issues.
5. Be prepared for advanced educational programs in public health.

The objectives were not as measurable overall as we would like, so the SLOs were revised to be more measurable (shown below). Notice that SLOs #4 and #5 are not measurable (and therefore not assessable) at all. Although #5 could be assessed through numbers accepted into graduate schools, we do not have that data for the majority of graduates. Again, we wanted to make sure that the language within the SLOs were conducive to being measured objectively. “Be knowledgeable...” and “Possess” are not measurable, so we have traded those terms for verbs like “describe” and “design.” Also, several of these SLOs are really multiple SLOs in one. For instance, SLO #1 has now been broken down into SLO #1 and #2 (shown below), since these are different aspects of public health in actuality and therefore do not belong in one SLO. SLO #2 above was also multi-faceted and was therefore split into the new SLO #3 and 4 below. The old SLO #3 morphed into the new SLO #5, now more precise and measurable. The new SLOs 6-10 were added to the previous SLOs; #9 and #10 are closely related to the NIU undergraduate SLOs. #9 really is Baccalaureate SLO E restated, and fits well with our two writing infused courses (PHHE 467 and 469). #10 is related to the human diversity requirement, Baccalaureate SLO B, and is also essential to public health.

New student learning outcomes (SLOs) were developed in the Public Health Curriculum and Assessment Committee around spring of 2016 and approved by faculty vote in summer 2016. In response to feedback on the Assessment Plan provided in 2019, the SLOs were further modified as follows:

## **2. Student Learning Outcomes**

All graduates of the Public Health program, regardless of emphasis, shall:

1. Identify the determinants of public health outcomes and health disparities.
2. Describe the organization of the health care system and the relationship of that system to the broader social, political and economic environment.
3. Design and evaluate solutions to public health problems based on community needs assessment.
4. Apply fundamental statistical concepts and techniques to the evaluation of health information and perform elementary research analyses.
5. Identify and apply the Essential Public Health Services.
6. Describe the influence of the environment on health.
7. Apply appropriate research methods to a public health problem.
8. Communicate effectively about public health issues, both orally and in writing.

### 3. Program-by-Baccalaureate Student Learning Outcomes Matrix

| Program Student Learning Outcome   | Baccalaureate Student Learning Outcomes            |                               |   |  |  |                            |   |                                      |
|--|--|-------------------------------|---|--|--|----------------------------|---|--------------------------------------|
|  | A. Global inter-connections and inter-dependencies | B. Intercultural competencies | C. Analyze human life and natural world inter-connections | D. Critical, creative, and independent thought | E. Communicate clearly and effectively | F. Collaborate with others | G. Quantitative and qualitative reasoning | H. Apply knowledge/skills creatively |
| Identify the determinants of public health outcomes and health disparities.  | S  | S                             | S   | M  |  | S                          |   | M                                    |
| Describe the organization of the health care system and the relationship of that system to the broader social, political and economic environment. |  | S                             |   | S  | M                                      |                            | M   |                                      |
| Design and evaluate solutions to public health problems based on community needs assessment.   |  |                               |   | M  | M                                      |                            |   | M                                    |
| Apply fundamental statistical concepts and techniques to the evaluation of health information and perform elementary research analyses.            |  |                               |   | S  |  |                            | S   | S                                    |
| Identify and apply the Essential Public Health Services.   |  |                               |   |  | M                                      |                            |   |                                      |
| Describe the influence of the environment on health.   | M  |                               | S   |  | M                                      |                            |   |                                      |

| Program Student Learning Outcome   | Baccalaureate Student Learning Outcomes            |                               |   |  |  |                            |   |                                      |
|--|--|-------------------------------|---|--|--|----------------------------|---|--------------------------------------|
|  | A. Global inter-connections and inter-dependencies | B. Intercultural competencies | C. Analyze human life and natural world inter-connections | D. Critical, creative, and independent thought | E. Communicate clearly and effectively | F. Collaborate with others | G. Quantitative and qualitative reasoning | H. Apply knowledge/skills creatively |
| Apply appropriate research methods to a public health problem.   |  |                               |   |  |  | M                          | M   |                                      |
| Communicate effectively about public health issues, both orally and in writing.  |  |                               |   |  | S                                      | M                          |   |                                      |
| Overall  | M  | S                             | S   | S  | M                                      | S                          | M   | S                                    |
| <i>Note.</i> Gauge whether each program outcome strongly supports (S), moderately supports (M), or doesn't support (leave blank) each baccalaureate learning outcome |  |                               |   |  |  |                            |   |                                      |

#### 4. Curriculum Map

| Course   | B.S. in Public Health Student Learning Outcomes                             |  |  |   |  |  |  |   |
|----------|---|--|--|---|--|--|--|---|
|          | Identify the determinants of public health outcomes and health disparities. | Describe the organization of the health care system and the relationship of that system to the broader social, political and economic environment. | Design and evaluate solutions to public health problems based on community needs assessment. | Apply fundamental statistical concepts and techniques to the evaluation of health information and elementary research analyses. | Identify and demonstrate experience with the Essential Public Health Services. | Describe the influence of the environment on health. | Apply appropriate research methods to a public health problem. | Communicate effectively about public health issues, both orally and in writing. |
| PHHE 295 | B   | B  |  |   | B, D   | B  |  |   |
| PHHE 325 |   |  |  | B   |  |  | B  |   |
| PHHE 351 |   |  |  | B   |  | D  | B  | B   |
| PHHE 455 | D   |  |  |   |  | B  | D  | D   |
| PHHE 461 |   | D  |  |   |  |  |  | D   |
| PHHE 467 |   |  |  |   |  |  |  | D   |
| PHHE 469 | D   | B  | P  |   |  |  |  | P   |
| PHHE 489 | P*  | P*   | D*   | P*  | P*   | P*   | P*   | P   |

*Note:* Course supports the outcome at the B=beginning, D=developing, or P=proficient level.  
 7 of the 8 SLOs are met at the level of proficiency, the other one at the developing level. At the undergraduate level, we feel that proficiency may not necessarily need to be achieved for 100% of the SLOs.

\*depending on the specific internship

## 5. Assessment Methods

| Assessment Method  | Explanation  |                           |   |  |   |          |
|--|--|---------------------------|---|--|---|----------|
|  | Description  | Student-Level Achievement | Program-Level Target                    | When Data Will be Collected  | Person Responsible  | SLOs     |
| <b>End of Term Biostatistics Group Project (Appendices A, B)</b> | This project requires a minimum of 100 subjects from a cross-sectional survey or a secondary data analysis. The topic focuses on public health issues affecting the campus or community. The data analysis is conducted with SPSS software including graphics and summary statistics, and statistical hypothesis testing. The PowerPoint presentation includes an introduction, description of the data collection process, sampling, independent and dependent variables measurements, analysis methods, summary of the results and conclusion, and discussion. | Score of 70% or higher    | 80% of students will score at least 70% | Data collected every third fall and spring.<br><br>Reviewed every three years. | PHHE 325 faculty and instructors collect data.<br><br>The results are reported by the Program Coordinator to the faculty decisions about appropriate changes to the curriculum, if necessary. | <b>4</b> |
| <b>Core Functions Awareness Survey (Appendix C)</b>              | 20 question survey on the core functions of public health as they relate to the 10 essential public health services  | Score of 70% or higher    | 75% of students will score at least 70% | Data collected every third fall and spring.<br><br>Reviewed every three years. | PHHE 295 instructors collect data.<br><br>The results are reported by the Program Coordinator to the faculty decisions about appropriate changes to the curriculum, if necessary.             | <b>5</b> |

|  |   |                                     |   |   |  |                    |
|--|---|-------------------------------------|---|---|--|--------------------|
| <p><b>End of Term Environmental Health Project (Appendices D, E)</b></p> | <p>Students will identify environmental health concerns in their daily life and investigate potential risk factors (e.g. biological, chemical, physical, and socioeconomic) that directly and or indirectly affect public health in general and or occupational settings based on environmental risk assessment or epidemiologic approach. Students will specify approaches for assessing and controlling environmental hazards that pose risks to human health and safety.</p> | <p>Score 70% or higher</p>          | <p>75% of students will score at least 70% or higher</p>                  | <p>Data collected every third fall and spring.<br/><br/>Reviewed every three years.</p> | <p>PHHE 351 faculty and instructors collect data.<br/><br/>The results are reported by the Program Coordinator to the faculty decisions about appropriate changes to the curriculum, if necessary.</p> | <p><b>6</b></p>    |
| <p><b>Health Disparities Awareness Survey (Appendix F)</b></p>           | <p>20 question survey on Health Disparities</p>   | <p>Score of 70% or higher</p>       | <p>75% of students will score at least 70%</p>                            | <p>Data collected every third fall and spring.<br/><br/>Reviewed every three years.</p> | <p>PHHE 295 instructors collect data.<br/><br/>The results are reported by the Program Coordinator to the faculty decisions about appropriate changes to the curriculum, if necessary.</p>             | <p><b>1</b></p>    |
| <p><b>Final Group Program Plans (Appendix G)</b></p>                     | <p>The assessment of the capstone course was based upon the final group program plans submitted by students in the public health major (3-5 in each group) using the Final Paper Assessment Rubric.</p>   | <p>“Developing” level or higher</p> | <p>90% of the students in PHHE 469 will meet the “developing level or</p> | <p>Data collected every third fall and spring.<br/><br/>Reviewed every three years.</p> | <p>PHHE 469 faculty and instructors collect data.</p>  | <p><b>3, 8</b></p> |



|  |  |   |  |   |  |               |
|--|--|---|--|---|--|---------------|
|  |  |   | higher.” 75% will demonstrate this ability at the established or exemplary levels, for each of the associated learning outcomes. |   | The results are reported by the Program Coordinator to the faculty decisions about appropriate changes to the curriculum, if necessary.  |               |
| <b>Internship Performance (Appendix H)</b> | Each preceptor evaluates each student from the program at the end of the internship experience (PHHE 489).   | “Good” or higher  | 85% of students will receive an evaluation of good or excellent for each of the five associated learning outcomes                | Data collected every fall, spring, and summer.<br><br>Reviewed every three years. | Public Health Undergraduate Academic Adviser and Practicum Coordinator collects the data.<br><br>The results are reported by the Program Coordinator to the faculty decisions about appropriate changes to the curriculum, if necessary. | <b>1-4, 7</b> |
| <b>Alumni Survey(s) BSPH Supplemental</b>  | Programs are allowed to add a specific survey relevant to their own alumni to be attached to the official NIU Alumni Survey administered by the Office of Assessment Services. | The average rating given by supplemental alumni survey responders | 30% of BSPH alumni will respond to the NIU Alumni  | Data collected and reviewed every third year.                                     | Program Coordinator  | <b>1-8</b>    |

|                                       |  |   |  |  |  |  |
|---------------------------------------|--|---|--|--|--|--|
| <b>Alumni Survey<br/>(Appendix I)</b> |  | regarding level of preparation for each of the 10 SLOs will be 3.5 or higher. | Survey and complete the BSPH Supplemental Alumni Survey that accompanies the survey. |  |  |  |
|---------------------------------------|--|---|--|--|--|--|

## 6. Outcomes-by-Methods Matrix

| Assessment Method   | Program Student Learning Outcome  |  |  |   |  |  |  |   |
|---|---|--|--|---|--|--|--|---|
|   | Identify the determinants of public health outcomes and health disparities. | Describe the organization of the health care system and the relationship of that system to the broader social, political and economic environment. | Design and evaluate solutions to public health problems based on community needs assessment. | Apply fundamental statistical concepts and techniques to the evaluation of health information and elementary research analyses. | Identify and demonstrate experience with the Essential Public Health Services. | Describe the influence of the environment on health. | Apply appropriate research methods to a public health problem. | Communicate effectively about public health issues, both orally and in writing. |
| End of Term Group Biostatistics Project                         |   |  |  | D, F  |  |  |  | D, F  |
| Core Functions Awareness Survey                                 |   |  |  |   | D, F   |  |  |   |
| Environmental Health Assessment                                 |   |  |  |   |  | D, F   |  |   |
| Health Disparities Awareness Survey                             | D, F  |  |  |   |  |  |  |   |
| Health Planning Program Plan                                    |   |  | D, S   |   |  |  |  |   |
| Internship Performance (Preceptor and Practicum Student Survey) | I, S  | I, S   | I, S   | I, S  |  |  | I, S   | I, S  |

| Assessment Method  | Program Student Learning Outcome  |  |  |   |  |  |  |   |
|--|---|--|--|---|--|--|--|---|
|  | Identify the determinants of public health outcomes and health disparities. | Describe the organization of the health care system and the relationship of that system to the broader social, political and economic environment. | Design and evaluate solutions to public health problems based on community needs assessment. | Apply fundamental statistical concepts and techniques to the evaluation of health information and elementary research analyses. | Identify and demonstrate experience with the Essential Public Health Services. | Describe the influence of the environment on health. | Apply appropriate research methods to a public health problem. | Communicate effectively about public health issues, both orally and in writing. |
| Supplemental Alumni Survey   | I, S  | I, S   | I, S   | I, S  | I, S   | I, S   | I, S   | I, S  |
| <p><i>Note.</i> F=formative assessment, S=summative assessment, D=direct assessment, and I=indirect assessment. See the paragraph above for an explanation of each type of assessment.</p> |   |  |  |   |  |  |  |   |