



IUPUI

## RICHARD M. FAIRBANKS SCHOOL OF PUBLIC HEALTH

INDIANA UNIVERSITY

Indianapolis

**PRAC Annual Report**  
2015-16 Academic Year

### OVERVIEW

The IU Richard M. Fairbanks School of Public Health is dedicated to the pursuit of health for all people. Health is defined as the capacity to develop full human potential, not simply the absence of disease. In promoting the health of communities, we emphasize the prevention of disease and injury and recognize the interconnectedness of the physical environment and ecosystem to the health of the community. We strive to ensure that the interests of the public are represented in health policies and practices and supports activities that promote this comprehensive view.

The School is committed to the principles of equality, shared decision-making, and a focus on the social, biological and environmental determinants of health which are central tenets of healthy communities and social justice. We embrace collaborative and participatory activities as a means of working collectively with other institutions and organizations in the community, across the state, nationally and internationally to ensure healthy communities and populations, a prerequisite for social justice.

In this annual PRAC report, we will present competencies for each academic program (which includes both undergraduate and graduate programs), assessment measures, procedures, and associated outcomes for each academic program, as well as upcoming plans for the 2016-17 academic year.

### ACCREDITATION

The IU Richard M. Fairbanks School of Public Health is proud to be fully accredited by the Council on Education for Public Health (CEPH) as of June 2015. Accreditation is the culmination of a rigorous multi-year process involving an extensive self-study and a site visit by an accreditation team. In order to achieve accreditation, schools are required by CEPH to conduct a self-evaluation and submit a lengthy report detailing how the school meets a variety of criteria, including the school's curricula, student learning outcomes, resources, research opportunities, and students/faculty interaction. An on-site visit by peer reviewers was then conducted to validate the findings of the self-study.

The CEPH criteria were recently reviewed and vetted throughout the country over an 18-month process. Each criterion is being considered based on the question, "Does this requirement ensure quality of student learning or the student experience?" The new criteria will achieve the following:

- (1) Develop standards that focus on quality of learning
- (2) Simplify and reduce reporting burden
- (3) Increase flexibility and opportunities for innovation

Schools of public health are addressing core knowledge in innovative, interdisciplinary formats that include skills in high demand from employers, such as communication, professionalism and leadership, IPE, systems thinking, planning and management to promote health, public health and healthcare systems, and evidence-based approaches to public health. Under the new criteria, we will be expected to continue providing a structured foundational curriculum with explicit expectations about student learning; however, we will have increased flexibility in how we deliver the skills and knowledge to students. We will also have the ability to tailor instruction around foundational knowledge and skills to our institution's specific mission and goals.

In addition to CEPH accreditation, the MHA program is accredited by the Commission on Accreditation Healthcare Management Education (CAHME), and the Environmental Health Science major of the BSPH program is accredited by the Environmental Health Science and Protection Accreditation Council (EHAC). The School is also a member of the Association of Schools and Programs of Public Health (ASPPH) and the Association of Schools of Public Health in the European Region (ASPHER).

## **ACADEMIC PROGRAMS (current and new)**

The Fairbanks School of Public Health currently offers the eight (8) academic degree programs listed below.

- Bachelor of Science in Public Health (BSPH)
  - Community Health
  - Environmental Health Sciences
- Bachelor of Science in Health Services Management (BSHSM)
- Master of Public Health (MPH)
  - Epidemiology
  - Health Policy and Management
  - Biostatistics
  - Social and Behavioral Sciences
  - Environmental Health Sciences
- Master of Health Administration (MHA)
- Master of Science in Biostatistics (MS)
- Doctor of Philosophy (PhD)
  - Epidemiology
  - Health Policy and Management
  - Biostatistics

In addition, the following three (3) degree programs were recently approved by the IU Board of Trustees and if final approval is achieved by the ICHE, they will be offered for the first time in the fall of 2017:

- Bachelor of Science in Health Data Science (BS) (approved by the IU BoT)
- Master of Science in Product Stewardship (MS) (approved by the ICHE)
- Doctor of Public Health in Global Health Leadership (DrPH) (approved by the ICHE)

## **ASSESSMENT PROCEDURES AND FINDINGS**

For each degree program and area of specialization within the programs identified, there are clearly stated competencies that guide the development and implementation of the curriculum. To meet the requirements stipulated by our school's accrediting agency, CEPH, we must identify competencies for all programs at the bachelor's, master's and doctoral levels.

Our faculty members monitor and evaluate student progress in each of the academic programs to determine if competencies have been achieved. This is done through course requirements (assignments, exams, presentations, papers), internship experiences, and culminating experiences. Each program has an assigned Curriculum Committee that meets monthly to provide oversight, and an Academic Progress Review Committee that meets at least three times a year to monitor and evaluate student progress.

Once competencies are developed for each program, they are used to continually drive and update the curriculum. The competencies are available to students on the website and in the student handbooks. They are also linked to learning objectives and assignments in the course syllabi, on the internship proposal form, and in the capstone course or the final project proposal form.

One of the key components used to assess whether students can apply what they've learned in the program is the internship. Internships are offered in the undergraduate and master's level programs. For example, the MPH internship preceptor is required to evaluate the student midway through (120 hours) and at the end (240 hours) of the internship. Upon completion, the student is required to write a 10-15 page paper reflecting on various aspects of the experience, including: the activities they conducted or participated in; progress they made on their objectives; contributions they made to the agency site; competencies they gained; how their academic course work prepared them for work on the internship; and an overall evaluation of the internship, its structure, the nature of the projects, opportunities for learning new skills and observing new approaches, positive and negative experiences, and suggestions for improving future internships. Students are also required to submit products produced as part of their internship, such as reports, grant proposals, white papers, educational brochures, PowerPoint presentations, program plans, data analyses, etc. All of these items are considered by the faculty member when the grade (*Satisfactory* or *Unsatisfactory*) is assigned.

Another key assessment of student learning is the capstone experience, culminating project, thesis or dissertation, which are conducted toward the end of the education experience. Students are able to demonstrate that they have the knowledge, skills and applications expected of someone who has progressed through our academic programs. For example, all MPH students must enroll in, and pass, their culminating experience in order to graduate from the program. The experience is completed at the end of the program and is an opportunity to synthesize and apply skills and knowledge learned in their coursework. Students in selected concentrations have two options for completion of their culminating experience: 1) an independent project, known as the Final Concentration Project; or 2) successful completion of the capstone course or data project. The table below illustrates which concentrations require independent projects and which offer the capstone course or data project:

<b>MPH Concentration</b>	<b>Culminating Experience Options</b>
Biostatistics	Independent Project
Environmental Health Science	Independent Project
Epidemiology	Independent Project or 2-semester Epidemiology Data Project
Health Policy and Management	Independent Project or Capstone Course
Social and Behavioral Sciences	Independent Project or Capstone Course

In the capstone course, students attend class on a regular basis, complete weekly assignments, and work as a team on an identified project. Students are required to submit a product that is determined by the nature of their team project, a paper and an individual poster to present to faculty, staff, preceptors, students and community partners.

For the final concentration project, the general requirements are common across all concentrations. Students select a project topic in their chosen concentration based on academic and professional interests. The final concentration project frequently evolves from a problem or project identified during the internship experience.

Final project requirements are a 20-40 page paper, including a 250-word abstract and a poster presentation. Student topics may come from individual experiences in laboratories, public health agencies or community organizations. Examples of projects include: research study, policy analysis, management plan, program evaluation, health promotion curriculum or program plan, or grant proposal. While certain topics will not lend themselves to applied research studies, students must demonstrate the ability to define a problem, use appropriate methodology for understanding the problem, analyze the findings (raw or existing data, policy study or other measures), describe the significance of these findings, and offer appropriate solutions and/or recommendations. In consultation with their faculty advisor and preceptor, students identify specific competencies, from the MPH core and concentration, to be addressed during their final concentration project experience.

In the final evaluation the student is assessed on the competencies identified for the project as well as the following performance areas:

- Work ethic and commitment to project
- Ability to take initiative
- Ability to apply analytic skills
- Ability to function effectively in a team
- Comprehensive understanding of project content
- Ability to think critically
- Written expression
- Oral expression
- Relationship with others
- Capacity of independent work

For the final concentration project, the advisor has multiple structured and unstructured opportunities to supervise the student. An assessment of the identified competencies is conducted by the preceptor and faculty. Students must demonstrate an integration of public health knowledge in their concentration as well as across the various core areas of public health. Faculty advisors assign letter grades (A-F) to final projects based on the quality of the project paper, the quality of poster and presentation, evaluations by other faculty who attend the presentation, and a written evaluation from the preceptor. Students must receive a B or higher on the final project to graduate from the MPH program.

As another example, students in the MHA Program are assessed through the Health Care Applications of Strategic Management course, also referred to as the capstone project. The capstone project is a health service organization-sponsored project of significant importance to the sponsor as well as demanding of the student to apply knowledge, skills, and learning to a real administrative issue, challenge, or strategic or performance improvement opportunity. Students work in small teams on their project and interact frequently with the sponsoring health services organization during the semester.

The project requires students to utilize a variety of skills including interpersonal, conceptual, change management, critical thinking, report and executive writing, oral presentation, coordination, and

organization to satisfactorily fulfill the capstone project requirements. The student’s project provides valuable insight to help facilitate the transition from the academic setting to the healthcare industry workplace. The course also emphasizes the development of personal leadership philosophies, principles and style to help prepare the students for early career success and to set the foundation for professional growth and development.

Examples of MHA capstone projects include the following: developing a high-deductible health plan for a hospital; completing a gap analysis with recommendations for instituting a medical homes program for a large physician group practice; developing a new physician onboarding program for a large physician group practice; analyzing and making recommendations for minimizing hospital readmissions at two large academic health centers; developing a business case analysis for a large hospital simulation training center; developing inpatient protocols for the management of diabetic inpatients for a large academic health center; evaluating the need and making recommendations to institute physician leadership training for a large academic health center; analyzing and recommending appropriate patient panel sizes per physician in a large physician clinic program with multiple site locations; wellness and health promotion at an assisted living facility; completing a workforce analysis for a large hospital for recruiting purposes; and development of a business plan for an international health care business venture.

Evaluation of the MHA culminating experience documents the level of awareness, understanding, appreciation, command, and proficiency each student demonstrates through their capstone project. The Capstone Project Competency Evaluation forms are summarized, analyzed, and evaluated as to the competencies being demonstrated by students, along with their command and proficiency of the program competencies and their application in practice. The Capstone Project Competency Evaluation is completed by the course instructor using a variety of methods of input from and observation of the student. The methods for input and feedback are: the initial Capstone Project Proposal that includes anticipated competency content areas; initial project outline submitted by the student; initial and interim sponsor meeting reports; instructor interaction, monitoring, and coaching of students during the semester; in-class project presentations; presentations to sponsor and instructor; written report submitted to sponsor and instructor; and feedback from the sponsor.

The competencies indicate what students should be able to demonstrate by the time they reach the end of their education. The faculty and program directors would know if the competencies or outcomes have been attained by assessing students’ ability to successfully complete their practicum or internship, capstone, culminating project, thesis, and dissertation. Through these experiences, faculty, preceptors and research committees help students obtain the knowledge, skills and abilities, particularly if there are any gaps identified. The competencies are measured throughout each required course and through the practical or applied experiences that take place toward the end of their education. Assessment findings include feedback from faculty, preceptors, and employers. For example, when employers were asked if they feel that the MPH graduates are competent in the following areas, 23 employers responded with the following:

MPH Program Competencies	Yes	No	Undecided
Use biostatistical methods to analyze and report public health data.	69.6%	4.3%	26.1%
Specify approaches to assess, prevent and control environmental and occupational hazards to human health	56.5%	4.3%	39.1%
Use epidemiologic methods to collect, study, analyze and report the patterns of disease in human populations for diverse audiences.	82.6%	4.3%	13.0%
Identify and analyze the components and issues of leadership, including financing and delivery of public health services and	43.5%	17.4%	39.1%

Apply policy process, development and analysis methods to address current national, state and local public health issues.	56.5%	8.7%	34.8%
Identify social and behavioral science factors, theories and models and develop, implement and evaluate interventions designed to positively affect health behaviors in populations.	78.3%	4.3%	17.4%
Collect and disseminate public health data through the use of technology and media.	78.3%	4.3%	17.4%
Explain how human biology influences health and public health	65.2%	13.0%	21.7%
Exhibit high standards of personal and organizational integrity, compassion, honesty and respect for all people.	87.0%	0.0%	13.0%
Use systems methods to analyze the effects of political, social and economic influences on public health systems at the individual, community, state, national and international levels.	60.9%	17.4%	21.7%
Demonstrate the impact of diversity and culture on public health across discipline areas.	82.6%	8.7%	8.7%
Demonstrate an understanding of the basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of public health data.	91.3%	4.3%	4.3%

As a result of this feedback, improvements were made to the curriculum in several areas to enhance the instruction and increase/strengthen the learning experiences in certain areas. In addition to e-surveys, employers and stakeholders provide regular information to the school regarding graduates' ability to perform competencies through feedback in regular standing committee meetings, planning retreats, and meetings with the leadership of state and local health departments. Input is obtained on a regular basis in the following ways:

- a) During quarterly meetings of the Community Practice Committee comprised of employers, preceptors and community partners;
- b) From the dean's National Advisory Committee comprised of national and state leadership;
- c) From hospital and health department leadership during the strategic planning retreats;
- d) From adjunct faculty who practice in the field;
- e) During meetings among the Indiana State Health Commissioner, the dean, and the associate dean for public health practice who holds a joint appointment between the school and the state health department;
- f) During alumni association meetings.

**BSHSM Program:** The Bachelor of Science in Health Services Management degree consists of requirements designed to track the AUPHA (Association of University Programs in Health Administration) certification criteria. The curriculum provides students with knowledge and skills in the following competency areas: general management; health services management; health services applications; and health services integration. Competence in these areas is assessed by faculty through student performance in the practicum (H365) or the internship (H380), and by student performance in the applied health services management capstone experience (H474).

**BSPH Program:** In the Bachelor of Science in Public Health, students in the Environmental Health major complete either the Environmental Health Science Internship (A380) or the Public Health Field Experience (A466) to demonstrate their competencies. In the CH major, students complete the Applied Capstone Seminar (A400) or the internship in CH to demonstrate their competencies.

Faculty in the Environmental Health and Community Health majors assess students' competencies through these practical experiences as well as didactic course work.

**MPH Program:** In the MPH Program, when students plan their internship, they work closely with their faculty advisor to identify the core and concentration competencies that will be addressed during the internship. The student, faculty advisor, and preceptor sign the internship agreement form outlining the competencies for the practical experience. The preceptor and faculty advisor evaluate whether the student has met the competencies at the conclusion of the internship.

The MPH culminating experience is accomplished through completion of either a final concentration project or the capstone course. In preparation for the final project, students work with their faculty advisor and preceptor to identify the core and concentration competencies that will be addressed during the project experience. The identified competencies are evaluated by the preceptor and faculty advisor upon completion of the project and poster presentation. The option of completing the capstone course is available to students in two concentrations: Health Policy and Management and Social and Behavioral Sciences. The core and concentration competencies in the capstone course are outlined in the course syllabi and students identify the competencies that will be addressed by the various projects and papers assigned in the course. All MPH students, regardless of whether they complete a final concentration project or capstone course, prepare a paper and a poster to present to faculty, staff, students, and community partners. Each paper is evaluated by the capstone course instructor, and each poster presentation is evaluated by at least two faculty members who complete an evaluation form and submit it to the faculty advisor as part of the final grade for this experience. This evaluation form is in the Resource File. Following the poster sessions each term, faculty members discuss the strengths and weaknesses of the student presentations during departmental faculty meetings and in the MPH Program Committee meeting.

**MHA Program:** MHA Students complete a group capstone project in a healthcare setting. The Capstone Project Competency Evaluation forms are summarized, analyzed, and evaluated regarding their command and proficiency of the program competencies and their application in practice. The Capstone Project Competency Evaluation forms are completed by the course instructor with input from the respective capstone sponsor of the project. This evaluation form is in the Resource File. Methods for input and feedback on competencies include: the initial Capstone Project Proposal document that includes anticipated competency content areas for the project; initial project outline submitted by the student; initial and interim sponsor meeting reports; instructor interaction, monitoring, and coaching of student on project during the semester; in-class project presentation made by student; project presentation to sponsor and instructor; written report submitted to sponsor and instructor; and feedback from sponsor. The MHA Program Committee may make recommendations for any appropriate changes to future capstone projects or related processes for ongoing performance improvement purposes.

**MS Program:** MS students have the choice of completing either a comprehensive exam or a masters thesis. Evaluation of student progress in achieving the program competencies is conducted through one of these two mechanisms.

**PhD Program:** Monitoring of student progress in achieving the expected competencies of the PhD programs is done through evaluation of students' performance in the following areas: didactic courses for the major and minor, qualifying examination, research and writing phases of the dissertation, and oral defense of the dissertation.

In addition to the culminating experiences just described, students in the MPH, MS, and PhD  
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programs who meet the competencies in each course earn a grade of “B” or higher. Students who do not demonstrate competence earn a grade of “B-” or lower and must repeat the course if it is required (i.e. not an elective course). The MHA students who meet competencies for each course will earn a grade of “C” or higher; students who do not earn a grade of “C” or higher in a required course must repeat the course. Undergraduate students must maintain a minimum grade point average (GPA) of at least 2.5 in all of their coursework.

The school has implemented internal and external mechanisms for evaluation.

#### INTERNAL MECHANISMS

At the school level, the Evaluation and Assessment Committee reviews the school’s progress toward achieving the stated goals, objectives, and targets presented to the committee through routine data collection by the responsible parties assigned. The Evaluation and Assessment Committee reports these findings to the Dean’s Council on a semi-annual basis. The Dean’s Council (comprised of the dean, associate deans, director of finance and administration, director of marketing and communication, and director of development) has responsibility for overseeing the evaluation process as a whole.

The school’s standing committees provide additional infrastructure to assist the school in meeting the goals, objectives, and targets. The associate dean for education and the staff in the Office of Student Services are responsible for collecting and summarizing data regarding feedback from students, employers, and alumni to assess the extent to which the curriculum adequately prepares graduates for employment in their field.

#### EXTERNAL MECHANISMS

The NAC was established to provide the school guidance and advice as the school establishes priorities. Other external groups providing evaluation and assessment of students in our programs include the MPH Community Practice Committee and the BSPH Environmental Health Science (EHS) External Advisory Board. The MPH Community Practice Committee is comprised of community partners, internship preceptors, MPH alumni, faculty, staff, and students. This committee meets quarterly to provide feedback regarding the educational preparation of the MPH students and make recommendations for continuous improvement of the MPH Program. The BSPH EHS External Advisory Board meets annually and is comprised of partners from industry and the community. This external body provides feedback on curricular issues in the major, keeps the faculty apprised of current employer needs, and makes recommendations that help shape the future of the program.

In addition to CEPH accreditation, external accrediting bodies such as the Commission on Accreditation of Healthcare Management Education (CAHME) and the Environmental Health Science and Protection Accreditation Council (EHAC) provide evaluative feedback on the MHA Program (CAHME) and BSPH in Environmental Health (EHAC). The most recent reviews resulted in re-accreditation for the maximum allowable terms.

## PLANNING FOR LEARNING AND ASSESSMENT

### Courses and Other Learning Experiences by Which the Biostatistics PhD Competencies Are Met

	<p>FACULTY WILL HELP STUDENTS LEARN THE MATERIAL IN THE FOLLOWING COURSES, IN ADVISING SESSIONS, AND IN SESSIONS FACILITATED BY TEACHING ASSISTANTS.</p> <p>THE DESIRED BEHAVIORS WILL BE MEASURED BY ASSIGNMENTS, PAPERS, PRESENTATIONS AND EXAMS IN THE FOLLOWING COURSES AND THE DISSERTATION.</p>							
<p><b>GENERAL OUTCOMES WE ARE SEEKING - Graduates of this program will possess the knowledge and skills necessary to enter a career in this discipline.</b></p> <p><b>HOW WE KNOW IF THE OUTCOMES WERE ACHIEVED - If the general outcomes of the program are met, the student will be able to do the following:</b></p>	<b>STAT 519 Introduction to Probability</b>	<b>PBHL B518 Mathematical Statistics I</b>	<b>STAT 512 Applied Regression Analysis</b>	<b>STAT 525 Generalized Linear Model</b>	<b>STAT 536 Introduction to Survival Analysis</b>	<b>BIOS 515 Biostatistics Practicum</b>	<b>BIOS 527 Introduction to Clinical Trial</b>	<b>BIOS 546 Applied Longitudinal Data Analysis</b>
Acquire biostatistical knowledge and interpersonal skills needed to collaborate with health science investigators.	X		X	X	X	X	X	X
Formulate a health related question in statistical terms including appropriate hypothesis in order to develop appropriate statistical analysis plans.			X	X	X		X	X
Recognize important methodological issues through collaborative research.						X		
Derive improved methods as solutions to methodologic problems.		X	X	X	X			X

### Courses and Other Learning Experiences by Which the Epidemiology PhD Competencies Are Met

	FACULTY WILL HELP STUDENTS LEARN THE MATERIAL IN THE FOLLOWING COURSES, IN ADVISING SESSIONS, AND IN SESSIONS FACILITATED BY TEACHING ASSISTANTS. THE DESIRED BEHAVIORS WILL BE MEASURED BY ASSIGNMENTS, PAPERS, PRESENTATIONS, EXAMS IN THE FOLLOWING COURSES AND THE DISSERTATION.										
<b>GENERAL OUTCOMES WE ARE SEEKING - Graduates of this program will possess the knowledge and skills necessary to enter a career in this discipline.</b>  <b>HOW WE KNOW IF THE OUTCOMES WERE ACHIEVED - If the general outcomes of the program are met, the student will be able to do the following:</b>	PHBL E517 Fundamentals of Epidemiology	PBHL E601 Advanced Epidemiology	PBHL E715 Design and Implementation of Observational Studies	PBHL E730 Genetic and Molecular Epidemiology	PBHL H620 Patient-Reported Health Outcomes	PBHL B651 Biostatistics I	PBHL B662 Biostatistics II	PBHL E710 Advanced Public Health Survey Methods	PBHL E720 Analysis and Interpretation of Observational Studies	PBHL B653 Applied Multivariate Analysis in Public Health	PBHL E775 Doctoral Research Seminar
Design investigations of acute and chronic conditions as well as other adverse health outcomes in targeted populations.	X	X	X	X	X			X			
Analyze and evaluate data from epidemiologic investigations and surveillance systems.	X	X	X	X		X	X		X	X	
Differentiate special populations by race, ethnicity; culture; societal, educational, and professional backgrounds; age; sex; religion; disability; and sexual orientation.	X	X	X	X	X	X	X	X	X	X	X
Critically evaluate results of epidemiologic studies, include analyses, interpretation and conclusions.	X	X	X			X	X	X	X	X	X
Use current knowledge of causes of disease to guide epidemiologic practice.	X	X	X	X	X			X	X	X	X
Prepare written and oral reports and presentations to effectively communicate necessary information to professional audiences, policy makers, and the general public.	X	X	X			X	X	X			X
Develop community partnerships to support epidemiologic investigations.	X								X	X	
Prepare proposals for extramural peer-reviewed funding.											
Promote and model ethical conduct in epidemiologic practice.	X	X	X	X	X	X	X				
Bring epidemiologic perspectives to the development and analysis of public health policies.	X	X	X			X	X				

### Courses and Other Learning Experiences by Which the Health Policy & Management PhD Competencies Are Met

	<p>FACULTY WILL HELP STUDENTS LEARN THE MATERIAL IN THE FOLLOWING COURSES, IN ADVISING SESSIONS, AND IN SESSIONS FACILITATED BY TEACHING ASSISTANTS.</p> <p>THE DESIRED BEHAVIORS WILL BE MEASURED BY ASSIGNMENTS, PAPERS, PRESENTATIONS AND EXAMS IN THE FOLLOWING COURSES AND THE DISSERTATION.</p>							
<p><b>GENERAL OUTCOMES WE ARE SEEKING - Graduates of this program will possess the knowledge and skills necessary to enter a career in this discipline.</b></p> <p><b>HOW WE KNOW IF THE OUTCOMES WERE ACHIEVED - If the general outcomes of the program are met, the student will be able to do the following:</b></p>	PBHL H658 Health Policy and Program Evaluation	PBHL H680 Seminar: Contemporary HPM Challenges	PBHL H740 Workshop	PBHL H742 Practicum	PBHL H755 Research Seminars	PBHL H800 Dissertation	PBHL H686 topics /H751 Doctoral	PBHL H779 Seminar
Demonstrate in-depth knowledge of the history, structure, and operation of health care systems domestically and internationally.		X	X	X	X	X	X	
Understand and apply bioethical principles and theories and utilize them in research, policy, and practice.	X			X		X		
Design and conduct health policy and services research studies.	X					X		
Access, manage and utilize administrative and other secondary data sources in research studies.	X					X	X	
Prepare grant applications and manage research projects.	X					X		
Analyze and evaluate policies and programs.	X	X	X	X	X	X		
Utilize and report the results of advanced quantitative and qualitative data analysis.			X	X	X	X		X
Interpret and report the findings of original research for scholarly audiences.	X			X	X	X	X	X
Translate and apply findings from original and existing research in policy and practice.			X	X	X	X	X	X
Educate and train students and professionals about health policy and management.				X	X	X		X

### Courses and Other Learning Experiences by Which the MPH Competencies Are Met

	<p>FACULTY WILL HELP STUDENTS LEARN THE MATERIAL IN THE FOLLOWING COURSES, IN ADVISING SESSIONS, AND IN SESSIONS FACILITATED BY TEACHING ASSISTANTS.</p> <p>THE DESIRED BEHAVIORS WILL BE MEASURED BY ASSIGNMENTS, PAPERS, PRESENTATIONS AND EXAMS IN THE FOLLOWING COURSES AND PRACTICAL EXPERIENCES.</p>				
<p><b>GENERAL OUTCOMES WE ARE SEEKING - Graduates of this program will possess the knowledge and skills necessary to enter a career in this discipline.</b></p> <p><b>HOW WE KNOW IF THE OUTCOMES WERE ACHIEVED - If the general outcomes of the program are met, the student will be able to do the following:</b></p>	<b>PBHL S500 Social and Behavioral Sciences in Public Health</b>	<b>PBHL H501 US Health Care: Systems, Policy, and Ethical Challenges</b>	<b>PBHL E517 Fundamentals of Epidemiology</b>	<b>PBHL A519 Environmental Health Science</b>	<b>PBHL B551 Biostatistics for Public Health I</b>
Use biostatistical methods to analyze and report public health data.			X		X
Specify approaches to assess, prevent and control environmental and occupational hazards to human health and safety.				X	
Use epidemiologic methods to collect, study, analyze and report the patterns of disease in human populations for diverse audiences.			X		
Identify and analyze the components and issues of leadership, including financing and delivery of public health services and systems.		X			
Apply policy process, development and analysis methods to address current national, state and local public health issues.		X		X	
Identify social and behavioral science factors, theories and models and develop, implement and evaluate interventions designed to positively affect health behaviors in populations.	X				
Collect and disseminate public health data through the use of technology and media.		X	X		X
Explain how human biology influences health and public health practice.			X		
Exhibit high standards of personal and organizational integrity, compassion, honesty and respect for all people.	X	X	X		
Use systems methods to analyze the effects of political, social and economic influences on public health systems at the individual, community, state, national and international levels.		X		X	
Demonstrate the impact of diversity and culture on public health across discipline areas.	X	X	X	X	X
Demonstrate an understanding of the basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of public health data.		X	X	X	X

**Courses and Other Learning Experiences by Which the MHA Competencies Are Met**

		FACULTY WILL HELP STUDENTS LEARN THE MATERIAL IN THE FOLLOWING COURSES, IN ADVISING SESSIONS, AND IN SESSIONS FACILITATED BY TEACHING ASSISTANTS. THE DESIRED BEHAVIORS WILL BE MEASURED BY ASSIGNMENTS, PAPERS, PRESENTATIONS AND EXAMS IN THE FOLLOWING COURSES AND PRACTICAL EXPERIENCES.															
<p><b>GENERAL OUTCOMES WE ARE SEEKING - Graduates of this program will possess the knowledge and skills necessary to enter a career in this discipline.</b></p> <p><b>HOW WE KNOW IF THE OUTCOMES WERE ACHIEVED - If the general outcomes of the program are met, the student will be able to do the following:</b></p>		H501 U.S. Health Care: Systems, Policies, and Ethical Challenges	H507 Management of Individual and Group Behavior	H508 Managing Health Care Accounting Information for Decision-	H509 Financial Management Principles of Healthcare	H514 Health Economics	H516 Health Services Delivery and the Law	H518 Statistical Methods for Health Services	H521 Management Science for Health Services Administration	H523 Health Services Human Resources Management	H612 Marketing Health Services Delivery	H615 Healthcare Outcomes and Decision Making	H623 Healthcare Applications of Strategic Management	H624 Developing Strategic Capability	H628 Health Care Information Systems	H702 Internship in Health Services Management	
		Understand how decisions are made within the private, non-profit, and government sectors; understand connections across these sectors.	X			X	X	X									
Gain a broad knowledge of legal and economic contexts for health administration.						X	X										
Develop verbal and written communication and negotiation skills.			X							X							
Understand the principles of effective management leadership.			X		X						X		X				X
Develop skills in relationship/team building.			X		X	X				X							
Understand unique criteria of ethical standards and values for the profession.	X	X								X							
Understand the process of organizational development and change management.			X														
Understand the principles of effective recruitment and personnel management.			X							X							
Be able to identify the most appropriate business strategies, develop business plans around these strategies, and follow through with effective project management.					X				X				X	X			X



**Courses and Other Learning Experiences by Which the MS Competencies Are Met**

	<p>FACULTY WILL HELP STUDENTS LEARN THE MATERIAL IN THE FOLLOWING COURSES, IN ADVISING SESSIONS, AND IN SESSIONS FACILITATED BY TEACHING ASSISTANTS.</p> <p>THE DESIRED BEHAVIORS WILL BE MEASURED BY ASSIGNMENTS, PAPERS, PRESENTATIONS AND EXAMS IN THE FOLLOWING COURSES.</p>						
<p><b>GENERAL OUTCOMES WE ARE SEEKING - Graduates of this program will possess the knowledge and skills necessary to enter a career in this discipline.</b></p> <p><b>HOW WE KNOW IF THE OUTCOMES WERE ACHIEVED - If the general outcomes of the program are met, the student will be able to do the following:</b></p>	<p><b>STAT 519 Introduction to Probability (PREREQ)</b></p>	<p><b>STAT 528 mathematical Statistics I (PREREQ)</b></p>	<p><b>PBHL B641 Biost Method 1: Linear Regression</b></p>	<p><b>PBHL Biost Method 2: Categorical Data Analysis</b></p>	<p><b>PBHL Biost Method 3: Survival Data Analysis</b></p>	<p><b>BIOS S546 Method 4: Longitudinal Data Analysis</b></p>	<p><b>PBHL Biost Computing</b></p>
<p>Gain a thorough understanding of the principles of screening and disease surveillance, prevention, observational and intervention studies, the local, national, and global context of health problems, and the influence of cultural and social dimension of public health research and practice.</p>	X	X		X			
<p>Understand biostatistical principles, appropriate statistical technique, build skills in the design of clinical versus observational studies, data collection schemes and the analysis of the collected data plus interpretation and communication of the study results to public health practitioners.</p>			X	X	X	X	
<p>Identify appropriate methods for the design of data collection systems in the context of biomedical research as well as the proper management, analysis and interpretation of these data.</p>			X	X	X	X	X

**Courses and Other Learning Experiences by Which the BSPH in Community Health Competencies Are Met**

	FACULTY WILL HELP STUDENTS LEARN THE MATERIAL IN THE FOLLOWING COURSES, IN ADVISING SESSIONS, AND IN SESSIONS FACILITATED BY TEACHING ASSISTANTS.												
	THE DESIRED BEHAVIORS WILL BE MEASURED BY ASSIGNMENTS, PAPERS, PRESENTATIONS AND EXAMS IN THE FOLLOWING COURSES AND CAPSTONE SEMINARS.												
<b>GENERAL OUTCOMES WE ARE SEEKING - Graduates of this program will possess the knowledge and skills necessary to enter a career in this discipline.</b>													
<b>HOW WE KNOW IF THE OUTCOMES WERE ACHIEVED - If the general outcomes of the program are met, the student will be able to do the following:</b>	<b>PBHL E322 Principles of Epidemiology</b>	<b>PBHL A316 Environmental Health Science</b>	<b>PBHL B300 Introduction to Biostatistics</b>	<b>PBHL H320 Health Services Administration</b>	<b>PBHL P300 Community Health</b>	<b>PBHL P300 Public Health Ethics</b>	<b>PBHL P400 Social Determinants of Health</b>	<b>PBHL P400 Applied Capstone Seminar</b>	<b>PBHL P300 Research Methods in Public Health</b>	<b>PBHL S430 Theories of Health Behavior Change</b>	<b>PBHL S305 Careers in Public Health</b>	<b>PBHL P400 Community Intervention Methods</b>	<b>PBHL S340 Cultural Competency and the Promotion of Health</b>
Recognize the social determinants of health that impact individuals and communities in the U.S. and globally.							X	X		X			X
Explain the principles of epidemiology, environmental health, health care systems, and health policy and apply them to issues of public health.	X	X		X									
Describe the role and importance of data in public health.	X		X					X	X	X		X	
Describe the historical impact of public health nationally and globally.	X				X		X						
Identify and understand the key public health challenges, current and future, faced by the U.S. and the world.					X		X	X	X	X			
Assess individual and community needs for health and health education.					X			X	X	X		X	
Choose appropriate and quality sources of public health data, and correctly interpret the information provided.					X			X	X				
Implement health and health education interventions and programs.								X	X	X		X	
Administer health and health education interventions and programs.								X				X	
Communicate the role of fairness and justice in health equity.					X	X							X

**Courses and Other Learning Experiences by Which the BSPH in Community Health Competencies Are Met  
(CONTINUED)**

	<p>FACULTY WILL HELP STUDENTS LEARN THE MATERIAL IN THE FOLLOWING COURSES, IN ADVISING SESSIONS, AND IN SESSIONS FACILITATED BY TEACHING ASSISTANTS.</p> <p>THE DESIRED BEHAVIORS WILL BE MEASURED BY ASSIGNMENTS, PAPERS, PRESENTATIONS AND EXAMS IN THE FOLLOWING COURSES AND CAPSTONE SEMINARS.</p>												
<p><b>GENERAL OUTCOMES WE ARE SEEKING - Graduates of this program will possess the knowledge and skills necessary to enter a career in this discipline.</b></p> <p><b>HOW WE KNOW IF THE OUTCOMES WERE ACHIEVED - If the general outcomes of the program are met, the student will be able to do the following:</b></p>	<p><b>PBHL E322 Principles of Epidemiology</b></p>	<p><b>PBHL A3156 Environmental Health Science</b></p>	<p><b>PBHL B300 Introduction to Biostatistics</b></p>	<p><b>PBHL H320 Health Services Administration</b></p>	<p><b>PBHL P300 Community Health</b></p>	<p><b>PBHL P300 Public Health Ethics</b></p>	<p><b>PBHL P400 Social Determinants of Health</b></p>	<p><b>PBHL P400 Applied Capstone Seminar</b></p>	<p><b>PBHL P300 Research Methods in Public Health</b></p>	<p><b>PBHL S430 Theories of Health Behavior Change</b></p>	<p><b>PBHL S305 Careers in Public Health</b></p>	<p><b>PBHL P400 Community Intervention Methods</b></p>	<p><b>PBHL S340 Cultural Competency and the Promotion of Health</b></p>
<p>Communicate effectively orally and in writing with individuals at the community level as well as with diverse health stakeholders, providers, policy makers, etc.</p>								X	X		X	X	X
<p>Based on evidence and data, advocate for practices, programming, and policies that address health equity issues.</p>					X	X							X
<p>Demonstrate networking skills and cultural competency when engaging with colleagues and diverse stakeholders.</p>					X			X			X		X
<p>Demonstrate ethical decision making whenever serving in the role of a public health practitioner.</p>					X	X			X		X	X	X

**Courses and Other Learning Experiences by Which the BSPH in Environmental Health Sciences Competencies Are Met**

	<p>FACULTY WILL HELP STUDENTS LEARN THE MATERIAL IN THE FOLLOWING COURSES, IN ADVISING SESSIONS, AND IN SESSIONS FACILITATED BY TEACHING ASSISTANTS.</p> <p>THE DESIRED BEHAVIORS WILL BE MEASURED BY ASSIGNMENTS, PAPERS, PRESENTATIONS AND EXAMS IN THE FOLLOWING COURSES AND PRACTICAL EXPERIENCES.</p>										
<p><b>GENERAL OUTCOMES WE ARE SEEKING - Graduates of this program will possess the knowledge and skills necessary to enter a career in this discipline.</b></p> <p><b>HOW WE KNOW IF THE OUTCOMES WERE ACHIEVED - If the general outcomes of the program are met, the student will be able to do the following:</b></p>	<p><b>PBHL A316 Environmental Health Science</b></p>	<p><b>PBHL A410 Introduction to Environmental Toxicology</b></p>	<p><b>PBHL A416 Environmental Health Policy</b></p>	<p><b>PBHL A424 Environmental Health Science Technology: Managing Water and Waste</b></p>	<p><b>PBHL A428 Food Science and Sanitation</b></p>	<p><b>PBHL A433 Industrial Hygiene</b></p>	<p><b>PBHL A459 Environmental Science and Health Data Analysis</b></p>	<p><b>PBHL A460 Techniques in Environmental Science and Health</b></p>	<p><b>PBHL A451 Air Pollution and Control</b></p>	<p><b>PBHL A400 Public Health Application of GIS</b></p>	<p><b>PBHL A380 Environmental Health Science Internship</b></p>
Describe a framework to anticipate, recognize, evaluate, prevent, and control environmental exposures.	X	X		X	X	X			X		X
Use analytical tools and methods to characterize and address environmental health issues.						X	X	X	X	X	X
Practice critical thinking to characterize and address environmental health issues.	X	X	X	X		X	X		X		X
Acquire experience in communicating effectively with diverse stakeholders – both written and oral, public and interpersonal, professional and technical – on environmental health issues.	X	X	X			X	X	X		X	X
Classify human health effects of environmental exposures.	X	X		X	X	X	X		X		X
Identify barriers to health equity related to environmental health.	X		X			X			X		

### Courses and Other Learning Experiences by Which the BSHSM Competencies Are Met

	FACULTY WILL HELP STUDENTS LEARN THE MATERIAL IN THE FOLLOWING COURSES, IN ADVISING SESSIONS, AND IN SESSIONS FACILITATED BY TEACHING ASSISTANTS. THE DESIRED BEHAVIORS WILL BE MEASURED BY ASSIGNMENTS, PAPERS, PRESENTATIONS AND EXAMS IN THE FOLLOWING DIDACTIC AND APPLIED COURSES.									
<b>GENERAL OUTCOMES WE ARE SEEKING - Graduates of this program will possess the knowledge and skills necessary to enter a career in this discipline.</b>  <b>HOW WE KNOW IF THE OUTCOMES WERE ACHIEVED - If the general outcomes of the program are met, the student will be able to do the following:</b>	PBHL H120 Contemporary Health Care Issues	PBHL H375 Management of Health Services Organization	PBHL P300 Organizational Behavior in Healthcare Organizations	PBHL H352 Health Finance and Budgeting	PBHL H320 Health Systems Administration	PBHL E322 Principles of Epidemiology	PBHL H353 Advanced Health Finance and Budgeting	PBHL H401 Strategic Planning for Health Care Organizations	PBHL H474 Health Administration Ethics	PBHL H472 Applied Health Management
Communicate effectively with diverse stakeholders, including public health and health care professionals, individually and in group settings using verbal, written, and electronic modes of communication.	X	X	X	X	X	X	X	X	X	X
Use statistical and other quantitative analysis tools and techniques to understand issues and problems in health care organizations and systems.				X	X	X	X			
Use basic financial tools, principles, and practices to review and analyze financial performance of organizations and implement controls as required.		X		X	X		X	X		X
Apply human resource best practices for management of human capital in an organization.		X	X						X	X
Use marketing concepts and skills to analyze markets, develop marketing plans, and measure the impact of marketing activities to raise awareness and increase growth of the organization's market share.										X
Participate in developing and implementing plans and policies to improve the delivery of health services.	X	X	X	X	X		X	X	X	X
Work individually and within a team-setting by applying organizational knowledge and leadership skills.		X	X	X	X		X	X	X	X
Recognize and demonstrate sensitive to diverse points of view.	X	X	X		X			X	X	X
Seek principled solutions to health services delivery issues.	X	X	X		X			X	X	X

## EXAMPLES OF IMPROVEMENTS MADE BASED ON ASSESSMENT FINDINGS

The school has several processes in place to assist the school in planning, assessing, and improving the instructional effectiveness of the eight academic programs. Results from the school's evaluation process are used to drive improvements and enhance the quality of education in our school. Examples of improvements in the school based on the evaluation and assessment process thus far include:

1. a revision of the school's alumni and employer surveys
2. review and restructuring of the curriculum at the undergraduate and graduate levels
3. creation of new undergraduate courses needed in community health
4. hiring a career development director
5. hiring an associate dean for practice to advance service in public health
6. hiring a director of communications and marketing to strengthen the school's visibility
7. revision of the internship handbooks
8. development of new courses
9. hiring of new teaching faculty with expertise in needed areas
10. additional IT support, especially for online and hybrid courses
11. additional educational content to train students in SAS (statistical analysis system)
12. additional educational content at the undergraduate level to prepare students for CHES (certified health education specialist)
13. hiring of teaching assistants (TAs) to support student learning in biostatistics and epidemiology
14. expansion of student computer space in the school of public health
15. increase in minimum GPA college required to enter undergraduate majors and minors

All courses in the school are assessed through end-of-term student evaluations. Copies of all course evaluations are reviewed by the instructor, department chair, and associate dean for education and training. Course evaluation results are discussed between the fulltime faculty and department chair during the faculty member's annual faculty review. Feedback regarding course evaluation results of adjunct faculty is provided by the department chair overseeing that course. All junior faculties are expected to have classroom observations of their teaching. These observations are conducted by senior faculty, CTL, or the associate dean for education and training.

Instructional effectiveness is also evaluated through periodic surveys conducted of all students. Students were asked the following questions: 1) What are the most positive aspects of your academic experience in the school;

2) In what ways can the school improve your academic experience; and 3) Any other comments. Responses were received from MPH students (54.2%), BSHSM students (15.3%), MHA students (10.2%), PhD students in Health Policy and Management (8.5%), PhD students in Biostatistics (5.1%), PhD students in Epidemiology (3.4%), and BSPH students (3.4%). Feedback from such surveys are shared with the dean, associate deans, and department chairs. Examples of feedback received include:

1. The most positive aspects of the school's academic experience included:
  - I love how the classes are set-up. As you get further into the program, you realize how the classes overlap to reinforce the information.
  - Community engagement, practical experiences, discussion-based classes.
  - The professors are very knowledgeable in their teaching areas and provide examples from their field experiences along with the book content.
  - Projects are aligned with what is/will be expected in career.
  - The course requirements for the doctoral degree are very helpful. The faculty is always ready to assist in understanding course content and in addressing issues related to the doctoral degree process. The faculty advisers have been very helpful and supportive.
  - The applied nature of the biostatistics courses I have taken so far and the smooth transition I had from the MPH Biostatistics program to the PhD program.
  - The instructors are excellent. They are professional, caring towards students, and very well prepared for their courses.
  - The faculty are very personable and genuinely care about each student which makes the experience very rewarding.
  - Flexible online classes. Extremely helpful professors.
  - The increased number of electives that are interesting and relevant. Very impressive over the last 2 or 3 years.
  - I liked that I could pursue my own research interests. Many of the faculty and staff care about students and have been very helpful to me.
  - My professors have been great! They give great insight about their past experiences. You can tell they honestly care and they want us to thrive. I really enjoy attending class with them.
  - I like that there are a lot of active learning opportunities (you get to work with actual organizations on real projects).
  
2. Recommendations to improve the academic experience included:
  - I think the classes that are only offered in one semester, should be offered for both the Fall and Spring sessions.
  - I would like to have more online options.
  - Offer more courses in the evening.
  - More interdisciplinary presentations being offered within the school.
  - Offer more courses during daytime hours.
  - Develop/offer workshops to assist students in deciding what field they should enter (i.e. infectious disease epidemiology, pharmacoepidemiology, etc.).
  - More presentations in the evenings or on weekends.
  - Separate learning SAS from Biostats, or give the option of using SPSS. Learning SAS and Biostats concurrently is extremely challenging.
  - Cut out academic courses that do not seem relevant to the curriculum.
  - Any additional classes that could be offered online would be beneficial to me.
  - Be sure all professors grade submissions in a timely manner. Be sure all professors return emails from students in a timely manner. Provide a TA for all classes.
  - Please add more interesting courses so we have better choice for our electives.
  - Some of the course timings overlap so it would be great if they are at different times so that we have more options.

3. Additional comments included:

- Thank you for taking the time to find out what is important to me.
  - Great program so far, that keeps me motivated!
  - I'm excited and proud to be part of school!
  - Thanks the experience here, I will cherish it forever.
  - I am enjoying my time as a student and am looking forward to seeing how the school grows.
  - Excited about the growth of the school.
  - As a student working full time and taking classes on the side, I appreciate the online course options and the flexibility in the program.
  - I think this is a great program and I feel fortunate to have been able to further my education here.
  - I think Fairbanks is on the right track in growth and initiatives.
  - I am glad to hear that the MPH program will be offering two different class options for statistics including SPSS.
- Thank you for listening.