IU Richard M. Fairbanks School of Public Health
PRAC Annual Report
2017-18 Academic Year

OVERVIEW

In this PRAC report, the Fairbanks School of Public Health presents the competencies for each academic program (undergraduate and graduate), assessment measures, and changes made as a result of the assessments.

The IU Richard M. Fairbanks School of Public Health (FSPH) mission, vision and core values are outlined on our website.

- **Mission**: The mission is to cultivate innovative, interdisciplinary, community engaged education, research and service and prepare leaders in public health and health care.
- **Vision**: The Fairbanks School of Public Health is a leader in improving the health of the people of Indiana, the nation and the world.
- **Values**: The core values guide all aspects of teaching, research and service: collaboration, commitment to social justice, environmental consciousness, cultural competency, equity, innovation, respect, and sensitivity to diversity.

ACCREDITATION

The IU Richard M. Fairbanks School of Public Health is fully accredited by the following agencies:
- Council on Education for Public Health (CEPH) – Entire School
- Commission on Accreditation of Healthcare Management Education (CAHME) – MHA Program
- Environmental Health Science & Protection Accreditation Council (EHAC) – BSPH Major in Environmental Health Science Program

In addition, the FSPH is planning to undergo scrutiny by faculty from around the globe via a self-study to pursue initial accreditation from the Agency for Public Health Education Accreditation (APHEA), which promotes and facilitates high quality, socially accountable and ethical education and training of public health institutions throughout the world. A site visit comprised of faculty reviewers from international institutions will take place in late spring or early summer of 2019. If accredited by APHEA, the FSPH would be the first school of public health in the U.S. to achieve this milestone.

The Fairbanks School of Public Health is 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). The ASPPH collects outcome data annually from all accredited schools of public health.

DIRECT AND INDIRECT MEASURES OF LEARNING

The FSPH continuously reviews data regarding feedback from students, employers, and alumni to assess the extent to which the curriculum adequately prepares graduates for employment in their field. In addition to direct measures such as applied practice experiences, integrated learning experiences, capstone projects, research papers, theses, dissertations, and e-portfolios, the FSPH uses indirect measures of learning, including graduation rates within the expected timeframe and job placement rates within 12 months of graduation. Indirect measures are reported annually to remain in compliance with accreditation standards.

The Fairbanks School of Public Health currently offers the 11 academic degree programs, some with multiple majors/concentration. In addition to the 11 degree programs listed below, the school also offers 4+1 accelerated degree programs and dual/joint degree programs.

1. Bachelor of Science in Public Health (BSPH)
   o Community Health Major
   o Environmental Health Sciences Major
   o Epidemiology (new)
2. Bachelor of Science in Health Services Management (BSHSM)
3. Bachelor of Science in Health Data Science (BSHDS)
4. Master of Public Health (launched in late spring of 2018)
   o Biostatistics Concentration
   o Environmental Health Sciences Concentration
   o Epidemiology Concentration
   o Health Policy and Management Concentration
   o Public Health Informatics (launched in the fall of 2018)
   o Social and Behavioral Sciences Concentration
5. Master of Health Administration (MHA)
6. Master of Science (MS) in Biostatistics
7. Master of Science (MS) in Product Stewardship
8. Doctor of Public Health (DrPH) in Global Health Leadership (launched in the fall of 2018)
9. Doctor of Philosophy (PhD) in Biostatistics
10. Doctor of Philosophy (PhD) in Epidemiology
11. Doctor of Philosophy (PhD) in Health Policy and Management

ASSESSMENT PROCEDURES AND FINDINGS

Student Assessment via Competency-based Curricula: For each degree program and area of specialization, there are clearly defined student competencies (learning outcomes) that guide the development and implementation of the curriculum. To meet the requirements stipulated by our school's accrediting agency, CEPH, we identify competencies for all programs at the bachelor's, masters and doctoral levels. Appropriate assessment methods are identified for these competencies. Curriculum committees at the undergraduate, masters and doctoral levels determine assessment findings and use them to make continuous improvements in instructional design, curricular content and sequence, and student services such as advising and career development. Faculty members monitor and evaluate student progress in each of the academic programs to determine if competencies have been achieved.

The competencies for each program are used as part of a deliberate and ongoing assessment of student learning and preparedness for the workforce. They are also used to continually drive and update/improve 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.

The table below illustrates the Applied Practice Experiences and Integrative Learning Experiences used to assess student learning.

Program	Applied Practice Experiences (APEs) and Integrative Learning Experiences (ILEs)
Bachelor of Science in Public Health (BSPH)	
• Community Health	Internship or Capstone Experience
• Environmental Health	Internship and Field Experience
• Epidemiology	Internship
BSPH in Health Services Management	Internship and Capstone Experience
BS in Health Data Science	2 Internships
Master of Public Health (MPH)	
• Biostatistics	Internship and Independent ILE Project
• Environmental Health Science	Internship and Independent ILE Project
• Epidemiology	Internship and Independent ILE Project or Applied Epidemiology Project
• Health Policy and Management	Internship and Independent ILE Project or Capstone Course
• Public Health Informatics	Internship and Independent ILE Project
• Social and Behavioral Sciences	Internship and Independent ILE Project or Capstone Course
Master of Health Administration (MHA)	Capstone Project: Healthcare Applications of Strategic Management Course
MS in Biostatistics	Comprehensive Exam or Thesis
MS in Product Stewardship	Final Paper
DrPH in Global Health Leadership	Dissertation and Oral Defense
PhD in Biostatistics	Dissertation and Oral Defense
PhD in Epidemiology	Dissertation and Oral Defense
PhD in Health Policy and Management	Dissertation and Oral Defense

Assessment of the competencies is conducted through course requirements (assignments, exams, presentations, papers), internship experiences, and culminating experiences. At the masters and doctoral levels, student learning is assessed in the capstone experience, culminating project, thesis or dissertation, all of which are conducted toward the end of the educational experience. These assessment measures demonstrate student knowledge, skills, attitudes, behaviors and values acquired as a result of their participation in the program.

Before students earn their diploma, they must demonstrate the knowledge, skills and applications expected of someone who has progressed through their academic programs. For example, all MPH students must enroll in, present (in poster format), and pass their culminating experience in order to graduate from the program. The experience is completed at the end of the program and is a measure of students' ability to synthesize and apply skills and knowledge learned in the coursework.

Student audits are conducted at the conclusion of each term to review each student's progress toward graduation. The Academic Progress Review Committees meets at least three times per year to monitor and evaluate student progress and success in each program. Three Curriculum Committees meet monthly to provide oversight of the curriculum:
1. Undergraduate Program Committee (BSPH, BSHSM, BSHDS)
2. Masters Program Committee (MS, MPH, MHA)
3. Doctoral Program Committee (PhD, DrPH)

Examples of Designated Courses, Applied Practice Experiences (APEs), and Integrated Learning Experiences (ILEs) to Assess Learning

BSPH Program: In the Bachelor of Science in Public Health, students in the new Epidemiology major will complete a practical experience in a health department or other governmental agency. 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. Students in the CH major are eligible to take the CHES (Certified Health Education Specialist) exam, and one of the students from our school earned the highest CHES exam score in the U.S. Faculty in the Environmental Health and Community Health majors assess students' competencies through these practical experiences as well as didactic course work, both of which are evaluated by the National Environmental Health Science and Protection Accreditation Council (EHAC).

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). The BSHSM Program is working toward certification by the Association of University Programs in Health Administration (AUPHA). The AUPHA is a global network of colleges, universities, faculty, individuals and organizations dedicated to the improvement of health and healthcare delivery through excellence in healthcare management and policy education. Its mission is to foster excellence and drive innovation in health management and policy education, and promote the value of university-based management education for leadership roles in the health sector.

BS in HDS Program: Students in the Bachelor of Science in Health Data Science apply what they have learned in class during two required 3-credit health data science internships, (B401 and B402), which are typically conducted at Eli Lilly. The internships are evaluated by the preceptor and program director.

MPH Program: In the MPH Program, faculty assess whether students can apply what they've learned in the program during their internship or applied practice experience. Students identify the competencies to be addressed in their applied practice experience before they are approved to begin. 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 paper reflecting on various aspects of the experience, including: the activities they conducted or participated in; progress they made on their objectives; and how their academic course work prepared them for work on the internship. Students are required to submit two work products produced as part of their internship, such as reports, grant proposals, white papers, educational brochures, PowerPoint presentations, program plans, data analyses, etc. 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 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 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. 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.

MHA Program: Student learning in the MHA Program is 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. The Capstone Project Competency Evaluation forms are summarized, analyzed, and evaluated regarding students' 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. The MHA curriculum meets the standards for the Commission on Accreditation of Healthcare Management Education (CAHME). CAHME accreditation is the benchmark for students and employers that ensures the integrity of graduate healthcare management education.

MS Program in Biostatistics: Evaluation of student progress in achieving the program competencies is conducted through one of two mechanisms. The MS students have the choice of completing either a comprehensive exam or a master's research thesis in biostatistics (B711). Students taking the non-thesis option are required to take the MS competency exam. After passing the exam, students must then take six hours of electives. Students who do not pass the MS competency exam are required to enroll in B711 MS Thesis Research in Biostatistics.

PhD and DrPH Programs: Monitoring of student progress in achieving the expected competencies of the four doctoral 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.

Plans for the Future

In the coming year, the school will map its undergraduate program competencies to the new IUPUI+ Profiles of Learning for Undergraduate Success. Examples include:

Undergraduate Program	Competency	Linkage to IUPUI+ Profiles of Learning for Undergraduate Success
BSPH in Community Health	Based on evidence and data, advocate for practices, programming, and policies that address health equity issues.	Innovator
BSPH in Environmental Health	Acquire experience in communicating effectively with diverse stakeholders – both written and oral, public and interpersonal, professional and technical – on environmental health issues.	Communicator
BSPH in Epidemiology	Analyze and understand complex biological and disease risk factors in the US and globally	Community Contributor
BS in Health Services 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.	Communicator
BS in Health Data Science	Analyze results using appropriate biostatistical methods (analytical skills)	Problem Solver

Outcome	**How would you know it** (the outcome) **if you saw it?** (What will the student know or be able to do?) Student knowledge, skills, attitudes, behaviors and values acquired.	**How will you help students learn it?** (in class or out of class)	**How could you measure each of the desired behaviors listed in the second column?**	**What are the assessment findings and changes made based on findings?**
	PhD in Biostatistics			
	Competencies for the PhD in Biostatistics			
OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Acquire biostatistical knowledge and interpersonal skills needed to collaborate with health science investigators.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained.
	Formulate a health related question in statistical terms including appropriate hypothesis in order to develop appropriate statistical analysis plans.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	Student research productivity ranked #17 among PhD Programs in Biostatistics. Students presented their biostatistics research at national conferences.
	Recognize important methodological issues through collaborative research.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	Students teach this content to undergraduate students. Students secured high level positions in the field:
	Derive improved methods as solutions to methodologic problems.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	Research Scientist at Lilly Lead Biostatistician at Biogen Idec Inc Principal Biostatistician at GSK Senior Biostatistician at Novartis Pharm. Senior Research Statistician-Abbvie Inc Senior Biostatistician at Amgen
	PhD in Epidemiology			
	Competencies for the PhD in Epidemiology			
OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.		Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained.
	Design investigations of acute and chronic conditions as well as other adverse health outcomes in targeted populations.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Analyze and evaluate date from epidemiologic investigations and surveillance systems.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	Students presented their epidemiology research at national conferences.

OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Differentiate special populations by race, ethnicity; culture; societal, educational, and professional backgrounds; age; sex; religion; disability; and sexual orientation.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	Students teach this content to undergraduate students. Students can apply what they learn in the Public Health Corps. Students in this program obtain paid research assistantships on campus. Upon graduation, students secured high level positions in the field such as: -Faculty position – Purdue University Moffitt Cancer Center -Research Scientist – Global Health Outcomes Research Scientist at Eli Lilly -Faculty position at Ferris State University -Faculty Position – IU Fairbanks School of Public Health -Clinical Research Scientist at Eli Lilly
	Critically evaluate results of epidemiologic studies, include analyses, interpretation and conclusions.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Use current knowledge of causes of disease to guide epidemiologic practice.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Prepare written and oral reports and presentations to effectively communicate necessary information to professional audiences, policy makers, and the general public.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Develop community partnerships to support epidemiologic investigations.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Prepare proposals for extramural peer-reviewed funding.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Promote and model ethical conduct in epidemiologic practice.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Bring epidemiologic perspectives to the development and analysis of public health policies.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	

PhD in Health Policy and Management

Competencies for the PhD in Health Policy and Management

OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Demonstrate in-depth knowledge of the history, structure, and operation of health care systems domestically and internationally.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained. Students presented health policy research, and health systems and services research at national conferences.
	Understand and apply bioethical principles and theories and utilize them in research, policy, and practice.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Design and conduct health policy and services research studies.	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	

Developed at Indiana University-Purdue University Indianapolis - TWB

| OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline. | Access, manage and utilize administrative and other secondary data sources in research studies. | Courses, seminars in the department and on campus, research opportunities, dissertation | Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense | Students teach health policy and health services administration to undergraduate students.

Students secure fellowships and research assistantships.

Upon graduation, students secured high level positions in the field such as:
-Faculty position – Johns Hopkins School of Medicine
-Faculty position - IU School of Medicine
-Faculty position – IU School of Health and Human Sciences
-Deputy Director of Data Analytics at Indiana Family and Social Services Administration
-Policy, Research and Development Officer at Indiana Rural Health Association

Students won Academy Health Competition: Academy Health |
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| | Prepare grant applications and manage research projects. | Courses, seminars in the department and on campus, research opportunities, dissertation | Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense | |
| | Analyze and evaluate policies and programs. | Courses, seminars in the department and on campus, research opportunities, dissertation | Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense | |
| | Utilize and report the results of advanced quantitative and qualitative data analysis. | Courses, seminars in the department and on campus, research opportunities, dissertation | Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense | |
| | Interpret and report the findings of original research for scholarly audiences. | Courses, seminars in the department and on campus, research opportunities, dissertation | Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense | |
| | Translate and apply findings from original and existing research in policy and practice. | Courses, seminars in the department and on campus, research opportunities, dissertation | Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense | |
| | Educate and train students and professionals about health policy and management. | Courses, seminars in the department and on campus, research opportunities, dissertation | Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense | |

DrPH in Global Health Leadership

Competencies for the DrPH in Global Health Leadership

| OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline. | Explain qualitative, quantitative, mixed methods and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community and population) levels | Courses, seminars in the department and on campus, research opportunities, dissertation | Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense | Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained.

This new program just launched in the fall of 2018. Assessments are underway.

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| | Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue | Courses, seminars in the department and on campus, research opportunities, dissertation | Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense | |
| | Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health | Courses, seminars in the department and on campus, research opportunities, dissertation | Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense | |

OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Propose strategies for health improvement and elimination of health inequities by organizing stakeholders, including researchers, practitioners, community leaders and other partners	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained. This new program just launched in the fall of 2018. Assessments are underway.
	Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Integrate knowledge, approaches, methods, values and potential contributions from multiple professions and systems in addressing public health problems	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Create a strategic plan	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Facilitate shared decision making through negotiation and consensus-building methods	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Create organizational change strategies	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Propose strategies to promote inclusion and equity within public health programs, policies and systems	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Propose human, fiscal and other resources to achieve a strategic goal	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Cultivate new resources and revenue streams to achieve a strategic goal	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Design a system-level intervention to address a public health issue	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Integrate knowledge of cultural values and practices in the design of public health policies and programs	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	

OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Integrate scientific information, legal and regulatory approaches, ethical frameworks and varied stakeholder interests in policy development and analysis	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained. This new program just launched in the fall of 2018. Assessments are underway.
	Propose interprofessional team approaches to improving public health	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Assess an audience's knowledge and learning needs	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Deliver training or educational experiences that promote learning in academic, organizational or community settings	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Use best practice modalities in pedagogical practices	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Analyze the roles and relationships of international organizations and other entities influencing global health	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Critique the impact of global policies on health equity and social justice across a range of cultural, economic and health contexts	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Apply an understanding of global economic, political, and social conditions on population health worldwide	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	
	Apply diplomacy and conflict resolution strategies with global partners	Courses, seminars in the department and on campus, research opportunities, dissertation	Exams, papers, projects, presentations, PhD qualifying exam, PhD dissertation, oral defense	

Master of Public Health

Competencies for the MPH

OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Use biostatistical methods to analyze and report public health data.	MPH core courses, MPH internship, advanced courses in the concentration, MPH capstone/final project	Performance in courses, on exams, papers, projects, presentations, two work products produced during the 240-hr. MPH internship/applied practice experience, poster presentation and paper for integrated learning experience or capstone/final project	Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained. Each student presented their capstone project in the form of a paper and poster presentation to the faculty and community representatives. All students successfully passed this assessment. Added e-Portfolio as a requirement to assess the work of all MPH students. MPH interns participated in the IU SERT program: IU Student Enteric Response Team (IU SERT) To address the new competency, MPH students participated in interprofessional learning experiences through the IU Center for IPE. Students applied what they learned in practice settings through the Public Health Corps. Students secured jobs in leadership positions such as: -Epidemiologist at Indiana State Dept. of Health -Health Educator at IU Health -Policy Analyst -Environmental Health Specialist at the Marion County Public Health Dept.
	Specify approaches to assess, prevent and control environmental and occupational hazards to human health and safety.	MPH core courses, MPH internship, advanced courses in the concentration, MPH capstone/final project	Performance in courses, on exams, papers, projects, presentations, two work products produced during the 240-hr. MPH internship/applied practice experience, poster presentation and paper for integrated learning experience or capstone/final project	
	Use epidemiologic methods to collect, study, analyze and report the patterns of disease in human populations for diverse audiences.	MPH core courses, MPH internship, advanced courses in the concentration, MPH capstone/final project	Performance in courses, on exams, papers, projects, presentations, two work products produced during the 240-hr. MPH internship/applied practice experience, poster presentation and paper for integrated learning experience or capstone/final project	
	Identify and analyze the components and issues of leadership, including financing and delivery of public health services and systems.	MPH core courses, MPH internship, advanced courses in the concentration, MPH capstone/final project	Performance in courses, on exams, papers, projects, presentations, two work products produced during the 240-hr. MPH internship/applied practice experience, poster presentation and paper for integrated learning experience or capstone/final project	
	Apply policy process, development and analysis methods to address current national, state and local public health issues.	MPH core courses, MPH internship, advanced courses in the concentration, MPH capstone/final project	Performance in courses, on exams, papers, projects, presentations, two work products produced during the 240-hr. MPH internship/applied practice experience, poster presentation and paper for integrated learning experience or capstone/final project	

Developed at Indiana University-Purdue University Indianapolis - TWB

OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Identify social and behavioral science factors, theories and models and develop, implement and evaluate interventions designed to positively affect health behaviors in populations.	MPH core courses, MPH internship, advanced courses in the concentration, MPH capstone/final project	Performance in courses, on exams, papers, projects, presentations, two work products produced during the 240-hr. MPH internship/applied practice experience, poster presentation and paper for integrated learning experience or capstone/final project	Student led impactful public health initiative for HPV Awareness and Prevention at IUPUI: Public Health Capstone Project Students in this program applied what they learned to a global partnership Hassan 1st University A student in this program received the Public Health Leadership Award: Stephen Jay Leadership Award in Public Health Student received the David For Scholarship after Internship with Indiana General Assembly David Ford Scholarship Program improvements included: - Redesign of the MPH curriculum to reconfigure the five independent core courses into four integrated core courses + one elective - Restructuring and resequencing of the curriculum in several MPH concentrations based - A requirement of submission of two work products was added to the MPH internship. - Created new 4+1 Accelerated BSPH to MPH paths for advanced students who want to complete both degrees in a shorter period of time. Also created a 4+1 Accelerated BS in Biology to MPH.
	Collect and disseminate public health data through the use of technology and media.	MPH core courses, MPH internship, advanced courses in the concentration, MPH capstone/final project	Performance in courses, on exams, papers, projects, presentations, two work products produced during the 240-hr. MPH internship/applied practice experience, poster presentation and paper for integrated learning experience or capstone/final project	
	Explain how human biology influences health and public health practice.	MPH core courses, MPH internship, advanced courses in the concentration, MPH capstone/final project	Performance in courses, on exams, papers, projects, presentations, two work products produced during the 240-hr. MPH internship/applied practice experience, poster presentation and paper for integrated learning experience or capstone/final project	
	Exhibit high standards of personal and organizational integrity, compassion, honesty and respect for all people.	MPH core courses, MPH internship, advanced courses in the concentration, MPH capstone/final project	Performance in courses, on exams, papers, projects, presentations, two work products produced during the 240-hr. MPH internship/applied practice experience, poster presentation and paper for integrated learning experience or capstone/final project	
	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.	MPH core courses, MPH internship, advanced courses in the concentration, MPH capstone/final project	Performance in courses, on exams, papers, projects, presentations, two work products produced during the 240-hr. MPH internship/applied practice experience, poster presentation and paper for integrated learning experience or capstone/final project	
	Demonstrate the impact of diversity and culture on public health across discipline areas.	MPH core courses, MPH internship, advanced courses in the concentration, MPH capstone/final project	Performance in courses, on exams, papers, projects, presentations, two work products produced during the 240-hr. MPH internship/applied practice experience, poster presentation and paper for integrated learning experience or capstone/final project	

	Demonstrate an understanding of the basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of public health data.	MPH core courses, MPH internship, advanced courses in the concentration, MPH capstone/final project	Performance in courses, on exams, papers, projects, presentations, two work products produced during the 240-hr. MPH internship/applied practice experience, poster presentation and paper for integrated learning experience or capstone/final project	- Increased the number of co-curricular experiences. - Introduced more qualitative methods content in the MPH curriculum for students in all concentrations.
Master of Health Administration **Competencies for the MHA**

OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Understand how decisions are made within the private, non- profit, and government sectors; understand connections across these sectors.	MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course	Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting	Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained. Additional assessment measures were put in place as part of the program evaluation for reaffirmation of CAHME accreditation Students competed in annual case competition: Annual Case Competition Co-curricular experiences allow students to gain additional information in the competency areas: - IHEN - Night of Gratitude - ACHE - Early Careerist Group Curricular changes included: -Added two new courses to the MHA Curriculum: (1) Leadership and (2) Operations Management.
	Gain a broad knowledge of legal and economic contexts for health administration.	MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course	Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting	
	Develop verbal and written communication and negotiation skills.	MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course	Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting	
	Understand the principles of effective management leadership.	MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course	Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting	
	Develop skills in relationship/team building.	MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course	Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting	
	Understand unique criteria of ethical standards and values for the profession.	MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course	Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting	
	Understand the process of organizational development and change management.	MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course	Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting	

| OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline. | Understand the principles of effective recruitment and personnel management. | MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course | Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting | -Changed the LEAN course from an elective to a requirement.

-Eliminated redundancy and combined content into existing course (Management Sciences) to enhance students' data management and analysis skills.

-Re-arranged sequence of courses to allow for expanding Excel skills over the course of the curriculum.

-Based on student feedback, Operations Management was piloted as a hybrid course.

-Incoming students will be connected with mentor at orientation. |
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| | Be able to identify the most appropriate business strategies, develop business plans around these strategies, and follow through with effective project management. | MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course | Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting | |
| | Be sensitive to diversity in the population and its implications for health care delivery. | MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course | Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting | |
| | Have a basic working knowledge of statistical analysis. | MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course | Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting | |
| | Be able to measure and assess health status and health risks. | MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course | Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting | |
| | Evaluate health care process improvements and performance. | MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course | Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting | |
| | Develop analytic skills for effective decision making, including, economics and management science. | MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course | Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting | |
| | Have a command of the basic skills of accounting and financial management (e.g., prepare and manage budgets). | MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course | Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting | |
| | Understand principles of sound capital investment decisions. | MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course | Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting | |
| | Understand and appreciate how information technology supports business and clinical security and issues. | MHA core courses, advanced MHA courses, MHA Capstone Project: Healthcare Applications of Strategic Management Course | Performance in courses, on exams, papers, projects, presentations, MHA capstone project in a healthcare setting | |

MS in Biostatistics

Competencies for the MS in Biostatistics

| OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline. | 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. | MS core courses, elective courses, thesis or 6 additional credits | Performance in required and elective courses, performance on exams, biostatistics projects and papers | Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained.

Students presented their biostatistics research at national conferences.

Students serve at TAs in undergraduate and master's level courses.

Upon graduation, students secured positions as:
Biostatistician at Pfizer in China
Data Analyst at Xtend Healthcare
SAS Programmer at Medpace
SAS Programmer at BI in China
Biostatistician at Regenstrief Institute
Computational Statistician at Eli Lilly
PhD student in Bioinformatics
PhD student in Biostatistics |
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| | 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 date plus interpretation and communication of the study results to public health practitioners. | MS core courses, elective courses, thesis or 6 additional credits | Performance in required and elective courses, performance on exams, biostatistics projects and papers | |
| | 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. | MS core courses, elective courses, thesis or 6 additional credits | Performance in required and elective courses, performance on exams, biostatistics projects and papers | |

MS in Product Stewardship

Competencies for the MS in Product Stewardship

| OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline. | Describe the core functions, values and principles of environmental and occupational public health. | MS in Product Stewardship core courses, elective courses | Performance in product stewardship courses, on exams, in projects, presentations and papers | Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained.

This is a relatively new program so students have not completed the entire program yet. |
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| | Identify and characterize product hazards, exposures and risk through inherent product characteristics, uses and misuses of products. | MS in Product Stewardship core courses, elective courses | Performance in product stewardship courses, on exams, in projects, presentations and papers | |
| | Select and apply appropriate frameworks to analyze product risks to humans and the environment throughout product supply chains and product lifecycles. | MS in Product Stewardship core courses, elective courses | Performance in product stewardship courses, on exams, in projects, presentations and papers | |

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	Identify and evaluate current and emerging societal issues, regulatory requirements and voluntary frameworks that may affect products throughout their lifecycle.	MS in Product Stewardship core courses, elective courses	Performance in product stewardship courses, on exams, in projects, presentations and papers	Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained. This is a relatively new program so students have not completed the entire program yet.
	Assess and apply best practices to improve product sustainability and competitive advantage while minimizing business risk through management and product development.	MS in Product Stewardship core courses, elective courses	Performance in product stewardship courses, on exams, in projects, presentations and papers	
	Identify and recommend strategies to improve the capabilities of product stewardship organizations within the larger business construct.	MS in Product Stewardship core courses, elective courses	Performance in product stewardship courses, on exams, in projects, presentations and papers	
BSPH in Community Health **Competencies for the BSPH in Community Health**				
OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Recognize the social determinants of health that impact individuals and communities in the U.S. and globally.	BSPH courses in the Community Health major, required electives in public health, general electives, applied capstone seminar	Performance in community health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the applied capstone seminar	Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained. Curricular changes were made to enhance sequencing of content. 4+1 Accelerated BSPH to MPH was developed for strong students who want to complete their undergraduate and graduate degrees in five years instead of six. Graduates are employed in a variety of positions or are advancing their education by pursuing master's degrees: Alumni from the BSPH in Community Health Employment positions include: - Disease Prevention Specialist
	Explain the principles of epidemiology, environmental health, health care systems, and health policy and apply them to issues of public health.	BSPH courses in the Community Health major, required electives in public health, general electives, applied capstone seminar	Performance in community health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the applied capstone seminar	
	Describe the role and importance of data in public health.	BSPH courses in the Community Health major, required electives in public health, general electives, applied capstone seminar	Performance in community health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the applied capstone seminar	
	Describe the historical impact of public health nationally and globally.	BSPH courses in the Community Health major, required electives in public health, general electives, applied capstone seminar	Performance in community health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the applied capstone seminar	

OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Identify and understand the key public health challenges, current and future, faced by the U.S. and the world.	BSPH courses in the Community Health major, required electives in public health, general electives, applied capstone seminar	Performance in community health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the applied capstone seminar	- Health Advocate - Health Coach - Health Educator - Program Coordinator - Worksite Wellness Educator - Community Outreach Coordinator
	Assess individual and community needs for health and health education.	BSPH courses in the Community Health major, required electives in public health, general electives, applied capstone seminar	Performance in community health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the applied capstone seminar	
	Choose appropriate and quality sources of public health data, and correctly interpret the information provided.	BSPH courses in the Community Health major, required electives in public health, general electives, applied capstone seminar	Performance in community health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the applied capstone seminar	Student in this program scored highest on the CHES exam Highest Score in the U.S. Students in this program won the Indiana SOPHE Case Study Competition InSOPHE Case Study Competition
	Implement health and health education interventions and programs.	BSPH courses in the Community Health major, required electives in public health, general electives, applied capstone seminar	Performance in community health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the applied capstone seminar	One of the students in this program was named to the IUPUI Top 100 Students: IUPUI Top 100 Students
	Administer health and health education interventions and programs.	BSPH courses in the Community Health major, required electives in public health, general electives, applied capstone seminar	Performance in community health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the applied capstone seminar	One of the students in this program was named the first CoSIDA Academic All-American honoree: Academic All-American and IUPUI Chancellor's Scholar Recipient: Chancellor's Scholar Award.
	Communicate the role of fairness and justice in health equity.	BSPH courses in the Community Health major, required electives in public health, general electives, applied capstone seminar	Performance in community health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the applied capstone seminar	Program change: hired an additional academic advisor to support diverse student population. For example, relative to the percentage on campus, our school has a higher percentage of First Generation students, 21st Century Scholars and underrepresented minority populations.
	Communicate effectively orally and in writing with individuals at the community level as well as with diverse health stakeholders, providers, policy makers, etc.	BSPH courses in the Community Health major, required electives in public health, general electives, applied capstone seminar	Performance in community health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the applied capstone seminar	

OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Based on evidence and data, advocate for practices, p rogramming, and policies that address health equity issues.	BSPH courses in the Community Health major, required electives in public health, general electives, applied capstone seminar	Performance in community health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the applied capstone seminar	
	Demonstrate networking skills and cultural competency when engaging with colleagues and diverse stakeholders.	BSPH courses in the Community Health major, required electives in public health, general electives, applied capstone seminar	Performance in community health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the applied capstone seminar	
	Demonstrate ethical decision making whenever serving in the role of a public health practitioner.	BSPH courses in the Community Health major, required electives in public health, general electives, applied capstone seminar	Performance in community health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the applied capstone seminar	

BSPH in Environmental Health Science

Competencies for the BSPH in Environmental Health Science

OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Describe a framework to anticipate, recognize, evaluate, prevent, and control environmental exposures.	Foundations and methods courses in the Environmental Health major, electives, required internship	Performance in environmental health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required environ. health internship	Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained.

A 4+1 Accelerated BSPH to MPH is under development.

The curriculum has been redesigned to include more courses in global health protection.

Environmental Health Science majors completed 240 hours of internship experience. This connected them to the community and provided an excellent way to gain work experience and |
| | Use analytical tools and methods to characterize and address environmental health issues. | Foundations and methods courses in the Environmental Health major, electives, required internship | Performance in environmental health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required environ. health internship | |
| | Practice critical thinking to characterize and address environmental health issues. | Foundations and methods courses in the Environmental Health major, electives, required internship | Performance in environmental health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required environ. health internship | |

OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Acquire experience in communicating effectively with diverse stakeholders – both written and oral, public and interpersonal, professional and technical – on environmental health issues.	Foundations and methods courses in the Environmental Health major, electives, required internship	Performance in environmental health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required environ. health internship	professional networks to launch their career. Our National Environmental Health, Science and Protection Accreditation Council (EHAC)-accredited program enables students in this program to apply for a nine-week, paid summer internship with the Centers for Disease Control (CDC). One of the students in this program was named Michael A. Carroll Scholarship Recipient: Michael A. Carroll Scholarship Recipient and IUPUI Top 100 Student: Top 100 Student
	Classify human health effects of environmental exposures.	Foundations and methods courses in the Environmental Health major, electives, required internship	Performance in environmental health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required environ. health internship	
	Identify barriers to health equity related to environmental health.	Foundations and methods courses in the Environmental Health major, electives, required internship	Performance in environmental health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required environ. health internship	

<p align="center"><strong style="color:red">BSPH in Epidemiology</p>

<p align="center"><strong style="color:blue">Competencies for the BSPH in Epidemiology</p>

OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Recognize the existence of a public health problem	Foundations and methods courses in the Epidemiology major, electives, required internship	Performance in epidemiology required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required epidemiology internship	Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained. This is a new major. The first cohort was just admitted. Assessments are underway.
	Collaborate with others inside and outside the agency to identify the problem	Foundations and methods courses in the Epidemiology major, electives, required internship	Performance in epidemiology required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required epidemiology internship	
	Identify surveillance data needs	Foundations and methods courses in the Epidemiology major, electives, required internship	Performance in epidemiology required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required epidemiology internship	
	Assist in design of investigation, including creating hypotheses	Foundations and methods courses in the Epidemiology major, electives, required internship	Performance in epidemiology required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required epidemiology internship	

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OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Develop an understanding of the social and behavioral determinants of health	Foundations and methods courses in the Epidemiology major, electives, required internship	Performance in epidemiology required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required epidemiology internship	Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained. This is a new major. The first cohort was just admitted. Assessments are underway.
	Analyze and understand complex biological and disease risk factors in the US and globally	Foundations and methods courses in the Epidemiology major, electives, required internship	Performance in epidemiology required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required epidemiology internship	
	Describe fundamental research methods used in the field of Public Health	Foundations and methods courses in the Epidemiology major, electives, required internship	Performance in epidemiology required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required epidemiology internship	

Bachelor of Science in Health Services Management

Learning Outcomes for Students in the BSHSM

OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	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.	BSHSM required courses, elective courses, practicum in health services	Performance in environmental health required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required environ. health internship	Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained. Graduates of this program secured entry-level managerial and administrative positions in health care organizations, including medical and dental practices, nursing homes and other long-term care facilities, hospitals and health systems and insurance companies. The BSHSM Alumni Profiles highlight the career outcome of graduates with this degree.
	Use statistical and other quantitative analysis tools and techniques to understand issues and problems in health care organizations and systems.	BSHSM required courses, elective courses, practicum in health services	Performance in the health services management required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required practicum in health services	
	Use basic financial tools, principles, and practices to review and analyze financial performance of organizations and implement controls as required.	BSHSM required courses, elective courses, practicum in health services	Performance in the health services management required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required practicum in health services	

| OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline. | Apply human resource best practices for management of human capital in an organization. | BSHSM required courses, elective courses, practicum in health services | Performance in the health services management required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required practicum in health services | The 4+1 Accelerated BSHSM to MHA recognizes the potential of high-performing undergraduate students to do graduate-level work.

The Health Services Management program recently updated its curriculum to better meet the needs and demands of the current healthcare market. Part of the curriculum redesign was the added requirement of an internship for all students.

Hired an additional academic advisor to support diverse student population. For example, relative to the percentage on campus, our school has a higher percentage of First Generation students, 21st Century Scholars and underrepresented minority populations. |
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| | 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. | BSHSM required courses, elective courses, practicum in health services | Performance in the health services management required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required practicum in health services | |
| | Participate in developing and implementing plans and policies to improve the delivery of health services. | BSHSM required courses, elective courses, practicum in health services | Performance in the health services management required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required practicum in health services | |
| | Work individually and within a team-setting by applying organizational knowledge and leadership skills. | BSHSM required courses, elective courses, practicum in health services | Performance in the health services management required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required practicum in health services | |
| | Recognize and demonstrate sensitive to diverse points of view. | BSHSM required courses, elective courses, practicum in health services | Performance in the health services management required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required practicum in health services | |
| | Seek principled solutions to health services delivery issues. | BSHSM required courses, elective courses, practicum in health services | Performance in the health services management required and elective courses, performance on exams, in projects, in class presentations and papers, performance in the required practicum in health services | |

BS in Health Data Science

Learning Outcomes for Students in the BSHDS

OUTCOME: Graduates have the knowledge and skills to enter a career in their discipline.	Demonstrate computing knowledge and "hacking" skills (data capture and visualization)	Health data science courses in the major, minor in either (a) Computer & Information Science or (b) Informatics, electives, 6-cr. internship in health data science, optional "hackathons" outside of class	Performance in the health data science required and elective courses, performance on exams, in "hackathons", in projects, in presentations and papers, performance in the 2-semester internship in health data science	Throughout each term, faculty continuously monitor student learning and track assessment findings to determine if competencies have been attained.
	Analyze results using appropriate biostatistical methods (analytical skills)	Health data science courses in the major, minor in either (a) Computer & Information Science or (b) Informatics, electives, 6-cr. internship in health data science	Performance in the health data science required and elective courses, performance on exams, in "hackathons", in projects, in presentations and papers, performance in the 2-semester internship in health data science	Students have secured internships, most of which have been at Eli Lilly.

This is a relatively new major, so graduation outcomes are not yet available. Assessments are underway. |
	Think critically and creatively to solve problems and discover meaning in large data (open-mindedness, curiosity)	Health data science courses in the major, minor in either (a) Computer & Information Science or (b) Informatics, electives, 6-cr. internship in health data science	Performance in the health data science required and elective courses, performance on exams, in "hackathons", in projects, in presentations and papers, performance in the 2-semester internship in health data science	
	Conduct biostatistical analysis in an ethical and responsible manner (professionalism)	Health data science courses in the major, minor in either (a) Computer & Information Science or (b) Informatics, electives, 6-cr. internship in health data science	Performance in the health data science required and elective courses, performance on exams, in "hackathons", in projects, in presentations and papers, performance in the 2-semester internship in health data science	
	Effectively communicate results of analyses to non-experts (communication, "story-telling", presentation skills)	Health data science courses in the major, minor in either (a) Computer & Information Science or (b) Informatics, electives, 6-cr. internship in health data science	Performance in the health data science required and elective courses, performance on exams, in "hackathons", in projects, in presentations and papers, performance in the 2-semester internship in health data science	

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