

## IU Richard M. Fairbanks School of Public Health

There has never been a more exciting time to be involved in public health. Currently, we face extraordinary challenges, but we have also been given the unique opportunity to transform the health of people in Indiana and beyond. At the Fairbanks School of Public Health, we're committed to creating a healthier state, nation, and world by improving strategies to prevent illness, disability, and injury and by improving how healthcare services are delivered.

The work we do in public health matters now more than ever. Disease spreads regardless of where you live or what you believe. Prevention benefits all people.

Our deep connections with practice and government give the Fairbanks School of Public Health an essential foundation to spark change in Indiana. Our location in downtown Indianapolis allows our students to study alongside policy makers, community activists, and groundbreaking researchers. Indianapolis is home to the largest health systems in Indiana, the Indiana State Department of Health, the Marion County Health Department, countless nonprofit organizations and top health-related companies.

Not only do students witness how public health laws are made a few short blocks away at the capitol, they also regularly engage with the Indiana general assembly in research and advocacy.

Whether you decide to pursue a career in practice or research, you will be working each day for prevention and policy that benefits all people. You will strive to ensure everyone has a chance at a long and healthy life. You will work to build healthier communities that will contribute to a healthier nation.

And when you graduate, you will join the largest public health alumni network in the state. From CEOs of hospital systems to world-renowned researchers, you will become a part of the Fairbanks alumni family.

Public health protects and improves the health of people where they live, work, and play.

Doctors and other healthcare providers treat illness or injuries, but in public health our goal is to prevent illness, disability, and injury and improve how healthcare services are delivered. We work to identify disease outbreaks, prevent injuries, and shed light on why some of us are more likely to suffer from poor health than others. And we implement large-scale solutions that improve the health of entire populations.

In the last 100 years, public health has added 25 years to the life expectancy of people living in the United States by advocating to protect our nation's health and safety. According to the Center for Disease Control, public health's 10 greatest achievements in the 20th century are:

- Immunizations
- Motor Vehicle Safety
- Workplace Safety
- Control of Infectious Diseases

- Declines in Deaths from Heart Disease and Stroke
- Safer and Healthier Foods
- Healthier Mothers and Babies
- Family Planning
- Fluoridation of Drinking Water
- Tobacco as a Health Hazard

As public health practitioners and researchers, we advocate for prevention and policy that benefits all people. We strive to ensure everyone has a chance at a long and healthy life. We work to build healthier communities that will contribute to a healthier nation.

Last updated: April 2023

### Department Overview

The Fairbanks School of Public Health is dedicated to the pursuit of health for all people. 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 support 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.

While the traditional regulatory, legal, and legislative functions of public health remain as important as ever today, public health is dynamic and must respond in innovative ways to emerging challenges to world health.

The IU Richard M. Fairbanks School of Public Health is proud to be fully accredited by the Council on Education for Public Health (CEPH). Our academic programs focus on public health and health care administration and include undergraduate and graduate degrees.

Our 120-credit Bachelor of Science in Health Data Science (BSHDS), Bachelor of Science in Health Services Management (BSHSM) and Bachelor of Science in Public Health (BSPH) offer strong foundations.

The 45-credit Master of Public Health (MPH) degree offers concentrations in the four core areas of public health: Epidemiology, Health Policy and Management, Public Health Informatics, and Social and Behavioral Sciences. The 51-credit Master of Health Administration (MHA) degree is fully accredited by the Council on the Accreditation of Healthcare Management Education (CAHME). The 42-credit Master of Science (MS) degree in Biostatistics provides highly focused training in statistical theory and biostatistical methods, with an emphasis on their application in a broad array of health sciences.

The 90-credit Doctor of Philosophy (PhD) degrees are available in Biostatistics, Epidemiology, and Health Policy and Management. The 45-credit Doctor of Public Health in

Global Health Leadership is fully accredited by the Council on Education for Public Health (CEPH).

We invite you to join us as we prepare future leaders, discover best practices, and implement innovative approaches to building a healthier world.

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## Mission, Vision, and Values

### Mission

The mission of the Indiana University Richard M. Fairbanks School of Public Health at IUPUI is to cultivate innovative, interdisciplinary, community engaged education, research and service and prepare leaders in public health and health care.

### Vision

The Indiana University Richard M. Fairbanks School of Public Health at IUPUI is a leader in improving the health of the people of Indiana, the nation and the world.

### Values

The Fairbanks School of Public Health has established core values to guide all aspects of teaching, research and service: collaboration, commitment to social justice, environmental consciousness, cultural competency, equity, innovation, respect, and sensitivity to diversity.

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## Graduate Policies

The academic policies and procedure pertaining to graduate programs in the Fairbanks School of Public Health are available in the student handbooks [on the school's website](#).

**Academic Probation** - In order to remain in good academic standing, graduate students must maintain a minimum GPA of 3.0 and progress satisfactorily toward graduation as outlined by the graduate program. Students are notified in writing if they have deficient academic progress and they may be placed on probation until the deficiency is rectified.

**Dismissal** - Academic progress is monitored at the conclusion of each term. Graduate students may be considered for dismissal if they fail to maintain adequate academic progress toward graduation. This standard is set by the faculty of each program or by the student's dissertation committee.

**Reinstatement** - Graduate students who seek reinstatement to the program after dismissal must reapply and be admitted to the program before they may enroll in courses.

**Grade Replacement** - All courses taken to meet the requirements of the graduate program are used to calculate the semester and cumulative GPA. Grades are not replaced when a graduate course is repeated; both the original and repeated grades are included in the calculation of the GPA.

**Incomplete Grades:** A grade of incomplete (I) indicates that a 'substantial portion' of the work in a course has been satisfactorily completed by the student as of the end of the semester. The incomplete can be given to a student facing a hardship such that it would be unjust to hold the

student to the established time limits for completing the work. Students should contact their instructor to determine if they are eligible for the incomplete. Poor performance is not grounds for an incomplete.

In some cases, the instructor may recommend or require a student to attend another term (or portion of a term) of the course to remove the incomplete. In this case, the student should not register for the course a second time. Instead, they should make arrangements with the instructor to remove the "I". Note that sitting in on a course to remove an "I" does not count towards a student's official credit enrollment for financial aid and loan deferment purposes.

Once the student has completed the work the instructor will change the incomplete to the appropriate letter grade.

A grade of incomplete must be removed within the time specified by the instructor of the course; if not, the grade automatically changes to an F one calendar year after the Incomplete was given.

**Withdrawal:** Students must formally withdraw from a course or courses in the timeframe allowed by the Registrar's Office. Failure to withdraw properly will result in receiving a grade of F in the course(s). Students are responsible for all course fees, plus any applicable late fees, through the time of official withdrawal. This information including deadline dates can be found at [Student Central](#).

**Dropping Classes During Automatic W Period:** After the 100 percent refund period, all drop requests require the approval of an academic advisor. Students will receive a W (withdrawn) on their transcript.

**Dropping Classes After Automatic W Deadline:** After the automatic W deadline students will need approval from their academic advisor, instructor, and school's dean. Additional information may be required to consider a drop this late in the semester. These requests are considered only in extraordinary circumstances beyond a student's control. Students may contact their instructor for other options such as obtaining an "I" incomplete grade. No drop requests will be processed once final exams begin.

**Residency Requirement for Degrees:** Candidates for master's degrees must complete at least 30 credit hours of graduate work in the Fairbanks School of Public Health. The DrPH candidates must complete all required courses in the Fairbanks School of Public Health, unless an exception is made by the program director. Candidates for the PhD degrees must complete at least 60 of the 90 required credit hours of graduate work in the Fairbanks School of Public Health.

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## Policies and Procedures

The Fairbanks School of Public Health policies and procedures for undergraduate education graduate programs are applicable to all public health degrees and students.

Questions about policies should be directed to the appropriate program director. Contact information is available [on our school website](#).

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## Undergraduate Policies

The following academic policies of the IU Richard M. Fairbanks School of Public Health are applicable to all School of Public Health undergraduate programs.

### Policies for Good Academic Standing, Dismissal and Reinstatement

#### Good Academic Standing

To be in good academic standing students must have a semester and IU cumulative GPA's (fall/spring/summer) of a 2.5 or higher. Students must have an IU cumulative GPA of 2.5 or higher to graduate.

#### Academic Warning

Students whose semester GPA (fall/spring/summer) falls below 2.5, but whose IU cumulative GPA remains 2.5 or higher will be placed on academic warning.

#### Academic Probation

Students whose Indiana University semester or cumulative grade point average (GPA) falls below a 2.5 will be placed on probation. Students on academic probation must follow strict conditions as established by the Undergraduate Academic Progress Review Committee during this probation period.

#### Final Academic Probation

A student whose IU cumulative GPA (fall/spring/summer) falls below 2.5 for a second time will be placed on final academic probation. Students on final academic probation must follow strict conditions as established by the Undergraduate Academic Progress Review Committee during this final probation period. The semesters in which a student is placed on academic probation may or may not be consecutive.

#### Dismissal

A student on whose IU cumulative GPA (fall/spring/summer) falls below a 2.5 for a third time will be subject to dismissal from Fairbanks School of Public Health at the discretion of the Undergraduate Academic Progress Review Committee. The semesters in which a student earns an IU cumulative GPA below 2.5 may or may not be consecutive.

#### Reinstatement

A student who has been dismissed from the Fairbanks School of Public Health for academic reasons may petition for readmission after their semester and IU cumulative GPA's have returned to good academic standing (2.5 or higher). In order to allow sufficient time for considering a petition for readmission, an eligible student should submit a petition before June 15th for the fall semester, October 15th for the spring semester, or March 15 for either summer session.

Reinstatement is not automatic and depends on a determination that the student will succeed. This determination is based on a careful review of the student's grades leading up to the dismissal, the student's reinstatement petition, and any other relevant information.

Before being reinstated, students may be required to participate in testing, advising, workshop sessions, or other activities designed to enable the student to succeed academically.

### Policies for Dean's List, Grading, Grade Replacement, Grade Appeal, Incomplete, Withdrawal, Forgiveness

#### Dean's List

Students who are enrolled in 12 or more hours of coursework are named to the Dean's List if they have earned a GPA of 3.5 or higher for the fall or spring terms. Courses must be taken for a letter grade; pass/fail credit hours are not counted in the Dean's List determination. The Dean's List is not computed for the summer sessions. Students with a grade of incomplete cannot be named to the Dean's List until the incomplete is removed.

#### Grading Policies

The Fairbanks School of Public Health follows the official grading system of Indiana University, described in the introductory section of the bulletin.

#### Grade Replacement

The Fairbanks School of Public Health follows the grade replacement policy at IUPUI. Students who have retaken a course (must be same department and course number) may request to have only the last grade computed in their grade point average. If a student earns the same or a higher grade after repeating a course, only the second grade will be counted in the GPA. Students may replace a total of 15 credit hours. Replacement does not occur automatically. Students must notify the School of Public Health advisor that the course has been taken a second time and that they wish to use grade replacement for the course.

#### Grade Appeal (Grade Change Request)

The Fairbanks School of Public Health follows the IUPUI grade appeal process. Under certain circumstances, students can petition for a grade change for a course that has been completed if the student believes that a grade has been calculated or assigned incorrectly. A student who is seeking a grade change must first contact the instructor and ask for the grade changes. A student has 90 days after the conclusion of a course to appeal a grade. In cases of extenuating circumstances, petitions filed after this date may be considered.

Occasionally a student may seek a withdrawal after a course has been completed. Changing a grade to a "W" after the grade is issued is rarely granted and only in extraordinary circumstances that prevented the student from officially withdrawing or would have imposed an unreasonable hardship on the student.

#### Incomplete

A grade of incomplete (I) indicates that a 'substantial portion' of the work in a course has been satisfactorily completed by the student as of the end of the semester. The incomplete can be given to a student facing a hardship such that it would be unjust to hold the student to the established time limits for completing the work.

Students should contact their instructor to determine if they are eligible for the incomplete. Poor performance is not grounds for an incomplete.

In some cases, the instructor may recommend or require a student to attend another term (or portion of a term) of the course to remove the incomplete. In this case, the student should not register for the course a second time. Instead, they should make arrangements with the instructor to remove the "I." Note that sitting in on a course to remove an "I" does not count as part of a full-time or part-time load for financial aid purposes or for loan deferments.

Once the student has completed the work the instructor will change the incomplete to the appropriate letter grade.

A grade of incomplete must be removed within the time specified by the instructor of the course; if not, the grade automatically changes to an F one calendar year after the incomplete was given.

### Withdrawal

Students must formally withdraw from courses in the timeframe allowed by the Registrar's office. Failure to withdraw properly will result in receiving grades of F in your courses. Students are responsible for all course fees, plus any applicable late fees, through the time of official withdrawal. This information including deadline dates can be found at [Student Central](#).

**Dropping classes during the automatic W period:** After the 100 percent refund period, all drop requests require the approval of an academic advisor. Students will receive a W (withdrawn) on their transcript.

**Dropping classes after the automatic W deadline:** After the automatic W deadline students will need approval from their academic advisor, instructor, and school's dean. Additional information may be required to consider a drop this late in the semester. These requests are considered only in extraordinary circumstances beyond the student's control. Students may contact their instructor for other options such as obtaining an "I" incomplete grade. No drop requests will be processed once final exams begin.

### Forgiveness Policy

The Fairbanks School of Public Health follows the IUPUI policies and processes for grade forgiveness. This policy applies to former IU students pursuing a first undergraduate degree who have been away from the IU system and have not attended any other college or university, including any campus of IU, for the last five years. For further information, visit [Grade forgiveness at IUPUI](#).

## Policies for Student Rights and Responsibilities, Confidentiality, and Academic Integrity

### Student Rights and Responsibilities

The School of Public Health fully supports the rights and responsibilities of students as defined in the IUPUI *Code of Student Rights, Responsibilities, and Conduct*. The *Student Code* spells out the expectations for faculty and students, and it provides the framework for the School of

Public Health's judicial process, which can be accessed at the School of Public Health website.

A student is entitled to rights in the pursuit of his or her education; freedom from discrimination and harassment; and freedom of association, expression, advocacy, and publication. A student also has the right to contribute to University governance, to receive accommodations for disabilities, and to access records and facilities. In accordance with federal law, student records are confidential and are available to other persons only under specific conditions as outlined in university regulations.

A student is responsible for upholding and following all applicable codes of conduct, including the IUPUI Student Code and course policies on classroom etiquette and disorderly conduct, and for obeying all applicable policies and procedures and all local, state, and federal laws. A student is responsible for facilitating the learning process, attending class regularly, completing class assignments and coming to class prepared. In addition, a student is responsible for planning his or her own academic program, planning class schedules, and for meeting the requirements for his or her degree or certificate programs.

Faculty and academic advisors are available to assist students in meeting degree requirements. A student is responsible for maintaining and regularly monitoring his or her university accounts including email and bursar accounts. A student is responsible for using university property and facilities in the pursuit of his or her education, while being mindful of the rights of others to do the same. A student is responsible for upholding and maintaining academic and professional honesty and integrity.

### Confidentiality of Student Records

In accordance with Indiana University regulations, student records are confidential and are available to other persons only under specific conditions as outlined in university regulations.

### Academic Integrity

Academic integrity is a basic principle of intellectual life that holds students responsible for taking credit only for ideas and efforts that are their own. Academic dishonesty violates that principle and undermines the bonds of trust and cooperation among members of the university community, and it is not tolerated. Academic misconduct includes cheating, fabrication, plagiarism, interference, violation of course rules, and facilitating academic dishonesty.

Students are responsible for knowing what behaviors and activities constitute these different forms of academic misconduct. Penalties and procedures that are applicable when academic misconduct or dishonesty occurs are described in the IUPUI *Code of Student Rights, Responsibilities, and Conduct*. More information about the IU Richard M. Fairbanks School of Public Health policy and procedures is available on page 10 of the Undergraduate Student Handbook on the Richard M. Fairbanks School of Public Health website in the Student Portal.

### **Sex Offenders Screening Policy for Students/Applicants**

Students and applicants should be aware that criminal convictions may result in ineligibility for participation in certain courses/activities within the School of Public Health. Questions regarding the School's policy on such matters should be addressed to the appropriate program director.

### **Policies Concerning Degree Requirements Applicability of Degree, Certificate and Minor Requirements**

Students may choose to complete either the specific degree, certificate, or minor requirements published in the appropriate bulletin at the time of entry into the university or those in the bulletin current at the time of graduation.

#### **Application for Degree**

All students must fill out an online [Graduation Form](#) at the School of Public Health website. This application should be completed by May 15 for a December graduation, October 15 for May graduation, or January 15 for August graduation.

#### **Degree Completion**

Students are expected to complete the requirements for their undergraduate degree within 10 years of admission to the School of Public Health. Students are allowed to continue beyond this time period only at the discretion of the director of undergraduate education. If a student has not taken classes for three years or more, he/she must satisfy program requirements of the School of Public Health in effect at the time of reactivation. Requests for deviation from requirements listed in the bulletin must be approved in writing by the director of undergraduate education, whose decision is final.

#### **Course Substitution and Course Waiver**

Requests for course substitutions and course waivers must be made to the faculty advisor.

#### **Degrees Awarded with Distinction**

The IU Richard M. Fairbanks School of Public Health recognizes outstanding performance by awarding bachelor's and associate degrees with three levels of distinction to students who rank in the upper 10 percent of their IU Richard M. Fairbanks School of Public Health graduating class by major and have completed a minimum of 60 hours at Indiana University for a B.S. The levels of distinction are as follows: highest distinction, 3.90 and above; high distinction, 3.70 through 3.89; distinction, 3.50 through 3.69.

#### **Double-Counting**

Generally, courses taken to meet a specific degree requirement cannot be double-counted (i.e., used to satisfy any other degree requirement). Students earning a School of Public Health major, minor, or certificate may double-count two courses across any allowable combination of these programs. The following restrictions apply: 1) students are limited to two minors and 2) School

of Public Health students may not earn a certificate or minor in the same area as their major.

#### **Grade Point Average Requirement**

**Matriculation.** A minimum cumulative GPA of 2.5 is required for the Bachelor of Science degree.

#### **Hours/Residency Requirement for degree**

The Fairbanks School of Public Health requires at minimum 30 of the 120 required credit hours earned for bachelor's degrees be credits earned at the institution itself, through arrangements with other accredited institutions, or through contractual relationships approved by the Commission. Any variation from the typical minima must be explained and justified.

#### **Internship Credit**

With IU Richard M. Fairbanks School of Public Health faculty approval, a student in good standing may earn 3-6 credit hours through the Fairbanks School of Public Health internship program. The Fairbanks School of Public Health internship program is described in more detail in the [Undergraduate Internship Handbook](#).

#### **Other Academic Programs**

School of Public Health students may choose to pursue a minor or certificate from another school or department or within School of Public Health in an area other than their degree or major. Students interested in a minor should contact that department for additional information.

#### **Pass/Fail Credit**

Deadlines for exercising this option are published on the [Student Central website](#) and are strictly enforced.

#### **Matriculation**

A student in good academic standing may choose to take a maximum of four elective courses (one per academic year) but not to exceed 12 credit hours total Pass/Fail for a B.S. degree.

#### **Requirements for a Second Bachelor's Degree**

Students must petition the School of Public Health for approval to work toward a second bachelor's degree. If permission is granted, students are required to take a minimum of 30 credit hours beyond the credits used for the first bachelor's degree and to satisfy all the requirements for the second degree. Generally, the School of Public Health encourages students to work toward a graduate degree or graduate certificate rather than a second bachelor's degree. Petitions should be submitted to the Undergraduate Program Committee.

#### **Honors College and Accelerated Master's Programs**

The School of Public Health programs for academically talented students. The programs provide students with an opportunity to earn advanced degrees in an accelerated timeframe.

#### **4+1 Accelerated Degree Program**

The 4+1 Accelerated Degree Program is a competitive program for outstanding School of Public Health

students who are seeking an advanced degree in health administration, community health or epidemiology. Participation in this program allows students to fulfill some graduate program requirements as undergraduates, and the graduate courses count for both graduate and undergraduate degree requirements. Students seeking admission to these programs must have at least 60 credit hours in the IU system at the time of admission. Specific GPA minimums are required. For additional information students should contact the program director or academic advisor.

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## Admissions

Students who transfer into the undergraduate Richard M. Fairbanks School of Public Health programs with college credit must have completed at least 12 credit hours at IUPUI and have at least a 2.5 cumulative and term GPA to be admitted. To remain in good standing, students must also maintain a term and cumulative grade point average of 2.5.

Students can be admitted to the Fairbanks School of Public Health through direct admission or as transfer students within the IU systems or from other institutions.

Students admitted to the Fairbanks School of Public Health are required to attend the undergraduate orientation, which is scheduled during the early part of the fall and spring semesters. The orientation provides students with an opportunity to become acquainted with the undergraduate teaching faculty and staff, and orients students to the Fairbanks School of Public Health's policies and procedures to ensure a successful transition to the school.

### Direct and Dual Admission

The Fairbanks School of Public Health has a special program to admit freshman students simultaneously to the School of Public Health and to University College. To be eligible for this dual admission, applicants must meet the general university and campus requirements for admission, have a minimum combined Scholastic Aptitude Test (SAT) math and critical reading test score of 1000 or ACT of 19 and have a 3.0 high school grade point average.

Students who do not qualify for dual admission at Indianapolis, or who choose not to apply for freshman-level direct entry may be admitted to the School of Public Health after they have completed 12 credit hours with 2.5 or better cumulative and semester grade point averages.

### Undergraduate External and Intercampus Transfer

#### Admission External Transfer

Students transferring from other institutions will receive direct admission to the School of Public Health, provided students have completed 12 hours of coursework at IUPUI and earned cumulative and semester (last semester at previous institution) grade point averages of 2.5 or better.

#### Intercampus Transfer

Permanent intercampus transfer students transferring from any campus of Indiana University will receive direct admission to the School of Public Health, provided

students have completed 12 hours, have earned cumulative and semester (last semester at previous institution) grade point averages of 2.5 or better.

### Undergraduate Probationary Admission

Applicants who do not meet the undergraduate admission requirements are not eligible for admission until they have met the admission requirements. Applicants who do not meet the School of Public Health's admission requirements may seek admission to University College.

For the most current Undergraduate admission requirements for the Fairbanks School of Public Health, please [visit our school's website](#).

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## Undergraduate Certificate Programs

### Discover Our Undergraduate Certificates

Whether you want to become a more competitive candidate for your dream job or gain additional expertise, a certificate at the Fairbanks School of Public Health will meet the needs of working professionals or pre-career students.

For more information about financial aid eligibility for certificate studies, please refer to the [approved certificate programs](#) and contact the IUPUI Office of Student Financial Services.

- Certificate in Community Health
- Certificate in Health Administration

Updated: April 2023

## Undergraduate Certificate in Health Administration

Designed for students interested in learning about the administrative and management functions required to run public health and healthcare organizations. Completing the Certificate in Health Administration will help prepare you for entry-level work in such organizations. Current health care professionals will find this certificate to be a time-saving way to develop the additional skills needed for career advancement.

### Eligibility

1. To earn the certificate, students must complete a minimum of 18 credits in accordance with the specified curriculum, and maintain a minimum cumulative grade point average of 2.5.
2. Students who successfully complete the requirements for the certificate will have this credential added to their official transcript. A printed certificate resembling a diploma will be awarded upon graduation.
3. Health services management students are not eligible for the health administration certificate.
4. Students must declare their intention to graduate with the certificate by completing the Application for Certificate form.

## Curriculum

### Required courses (9 credit hours)

- PBHL-H120\*: Health Care Delivery in the US
- PBHL H345\* Operations Management and Quality Improvement in Health Organization
- PBHL H375\* Management of Health Services Organizations

### Choose three courses (9 credit hours)

- PBHL H411 Chronic and Long-Term Care Administration (P: PBHL H120)
- PBHL H345\* Operations Management and Quality Improvement in Health Organization (P: PBHL H320)
- PBHL H420 Health Policy
- PBHL H432\* Health Care Marketing
- PBHL H441 Legal Aspects of Health Care Administration
- PBHL H320\* Health Services Administration (P: PBHL H120)
- PBHL H330\*\* Global Public Health
- PBHL H325 Health Information Technology, Management and Policy
- PBHL H346\* Organizational Behavior and HR Management in Healthcare
- PBHL H305\* Medical Group Management (PBHL H120)
- PBHL H315 High Risk Health Behaviors and Harm Reduction
- PBHL H352 Health Finance and Budgeting (P: PBHL H200)
- PBHL H353 Advanced Health Finance and Budgeting
- PBHL H200 Healthcare Accounting
- PBHL H101\* Influencing the Public's Health
- PBHL H361 Leadership in Health Management: Resolving Disputes and Difficult Conversations
- PBHL-H303 Topics in Public Health
- PBHL-H455 Topics in Public Health

\*These courses are offered online at least once per year.

\*\*This course is offered online in the summer.

### For students who started the certificate prior to fall 2023

### Required courses (9 credit hours)

- PBHL-H120: Health Care Delivery in the US
- PBHL H320\* Health Services Administration (P: PBHL H120)
- PBHL H375\* Management of Health Services Organizations

### Choose three courses (9 credit hours)

- PBHL H411 Chronic and Long Term Care Administration (P: PBHL H120)
- PBHL H345\* Operations Management and Quality Improvement in Health Organization (P: PBHL H320)
- PBHL H420 Health Policy
- PBHL H432\* Health Care Marketing

- PBHL H441 Legal Aspects of Health Care Administration
- PBHL H330 Global Public Health
- PBHL H325 Health Information Technology, Management and Policy
- PBHL H346 Organizational Behavior and HR Management in Healthcare
- PBHL H305 Medical Group Management (PBHL H120)
- PBHL H315 High Risk Health Behaviors and Harm Reduction
- PBHL H352 Health Finance and Budgeting (P: PBHL H200)
- PBHL H353 Advanced Health Finance and Budgeting
- PBHL H200 Healthcare Accounting
- PBHL H101\* Influencing the Public's Health
- PBHL H361 Leadership in Health Management: Resolving Disputes and Difficult Conversations
- PBHL-H303 Topics in Public Health
- PBHL-H455 Topics in Public Health

\* These courses are offered online at least once per year.

### Competencies

- Describe the structure and functioning of health care delivery, public health, and health services organizations and the importance of a population health perspective.
- Develop management skills necessary for non-clinical administrative or clinical leadership positions within healthcare and health services organizations.
- Examine methods and strategies specific to human resources, operations, reimbursement, policy, and quality improvement utilized in various health settings.

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## Certificate in Community Health

The Undergraduate Certificate in Community Health provides students with the knowledge, skills and hands-on experience that prepares them to tackle real-world health problems. The coursework for this certificate prepares students to take the Certified Health Education Specialist (CHES) exam.

### Eligibility

1. To earn the certificate, students must complete a minimum of 27 credits in accordance with the specified curriculum, and a "C" or higher is required in each course.
2. Students who successfully complete the requirements for the certificate will have this credential added to their official transcript. A printed certificate resembling a diploma will be awarded upon graduation.
3. Public Health students majoring in Community Health are not eligible for the Community Health Certificate.
4. Students must declare their intention to graduate with the certificate by completing the Application For Certificate form.

## Curriculum

### Required courses (12 credits)

- PBHL-S120 Introduction to Community Health
- PBHL-S315 Community Organizing for Health Promotion
- PBHL-S349 Research Methods in Community Health
- PBHL-S415 Applied Health Promotion Methods

### Elective courses (6 credits)

- PBHL-S305 Careers in Public Health
- PBHL-S337 Health Equity and Social Determinants of Health
- PBHL-S422 Coaching for Health Behavior Change Promotion

### For students who started certificate prior to fall 2023

The coursework below will prepare students to take the [Certified Health Education Specialist \(CHES\) exam](#). The certificate in Community Health curriculum consists of nine 3-credit hour courses:

- PBHL S120 Introduction to Community Health
- PBHL S305 Careers in Public Health
- PBHL S315 Community Organizing for Health Promotion
- PBHL S330 Theoretical Foundations of Community Health
- PBHL S349 Research Methods in Community Health
- PBHL S360 Assessment and Planning for Community Health Promotion
- PBHL S361 Implementation and Evaluation for Community Health Promotion

*PLUS - pick any two of the following courses:*

- PBHL S340 Cultural Considerations in the Promotion of Health
- PBHL S416 Health Promotion Application
- PBHL S422 Coaching for Health Behavior Change
- PBHL S460 Biosocial Approach to Global Health
- PBHL S469 Practicum in Community Health

## Competencies

1. Recognize the structural and social determinants of health that affect individuals and communities.
2. Demonstrate an appreciation of social justice as the ethical framework for advancing community health.
3. Explain and apply the public health domains of epidemiology, biostatistics, environmental health, and health policy and management to the social and behavioral sciences domain.
4. Describe the historical role of public health nationally and globally, and identify and understand current and future public health challenges faced by the U.S. and the world.
5. Obtain, analyze, synthesize, and apply quality data for assessment and planning in community health programs.
6. Engage community stakeholders and organize communities to determine health priorities and plan effective community health interventions and programs.

7. Coordinate and monitor the delivery of community health interventions and programs.
8. Implement appropriate and equitized data collection and analysis procedures for evaluation and research related to community health promotion.
9. Develop appropriate and effective health promotion communication materials and messaging.
10. Communicate effectively with diverse individuals, communities, and stakeholders.
11. Advocate for evidence-based practices, programming, and policies that affect the health of individuals and communities.
12. Demonstrate an understanding of, and ability to apply ethical decision making and professionalism.

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## Degree Programs

### Undergraduate Degree Programs

The Fairbanks School of Public Health currently offers three Bachelor of Science degrees: a Bachelor of Science in Health Data Science, a Bachelor of Science in Health Services Management and a Bachelor of Science in Public Health. For the most current information on Fairbanks School of Public Health Undergraduate Degree programs, please [visit our school's website](#).

- Bachelor of Science in Health Data Science
- Bachelor of Science in Health Services Management
- Bachelor of Science in Public Health

Updated: April 2023

### Degree Programs

The Fairbanks School of Public Health currently offers two Bachelor of Science degrees, a Bachelor of Science in Public Health with concentrations in Community Health or Environmental Health Science and a Bachelor of Science in Health Services Management. For the most current information on Fairbanks School of Public Health Undergraduate Degree programs, please visit our school's website at: <https://fsph.iupui.edu/index.html>.

### Health Data Science curriculum

The Bachelor of Science in Health Systems Management combines coursework in general education (communications, liberal arts, science, and quantitative methods), health care policy, finance and management to prepare students for positions in the health care arena in nonclinical work. The health care arena includes acute care, physician practice, and long-term care, insurance companies, and government. Positions are available in government and the private and not-for-profit sectors. Available positions include office manager, billing agent, project coordinator, HR recruiting specialist, marketing manager, claims adjudicator, clinical liaison, customer service representative, admissions staff, marketing specialist, and others.

### Degree Map for Health Services Management

Beginning in the Fall of 2013, Degree maps were finalized for the 2012-2014 Bulletin years. Click Health Services Management to find the Degree map. Please refer to the [Degree Map](#) website for future updates.



## Health Services Management curriculum

The Bachelor of Science in Health Systems Management combines coursework in general education (communications, liberal arts, science, and quantitative methods), health care policy, finance and management to prepare students for positions in the health care arena in nonclinical work. The health care arena includes acute care, physician practice, and long-term care, insurance companies, and government. Positions are available in government and the private and not-for-profit sectors. Available positions include office manager, billing agent, project coordinator, HR recruiting specialist, marketing manager, claims adjudicator, clinical liaison, customer service representative, admissions staff, marketing specialist, and others.

### Degree Map for Health Services Management

Beginning in the Fall of 2013, Degree maps were finalized for the 2012-2014 Bulletin years. Click Health Services Management to find the Degree map. Please refer to the [Degree Map](#) website for future updates.

### Bachelor of Science in Public Health

The Bachelor of Science in Public Health (B.S.P.H.) degree combines coursework in communications, mathematics, the basic sciences (biology, chemistry, physics) and public health with an emphasis on protecting human health and the quality of the built and natural environment from environmental hazards through pollution prevention and control. Employment areas include indoor and outdoor pollution, water supply and wastewater treatment, solid and hazardous waste, workplace health and safety, general environmental health, childhood lead poisoning and asthma control, environmental health education, environmental toxicology and microbiology, sustainability, housing safety and vector control, food safety and defense, hazardous materials, homeland security, and others.

The BSPH major in Community Health will prepare students to provide health education, promote healthy lifestyles and healthy choices, prevent diseases, and enhance quality of life in communities. Students will obtain a foundation in understanding the social determinants of health, distribution of health and illness in diverse populations, and the disease risks among human populations. The Community Health major focuses on interdisciplinary efforts to address the physical, social, behavioral, mental, and environmental health concerns of communities and population at risk for disease and injury. Graduates will plan and evaluate health services in communities. They will coordinate the community efforts of government agencies and private organizations.

### Degree Map for Community Health

Beginning in the Fall of 2013, Degree maps were finalized for the 2012-2014 Bulletin years. Click Community Health to find the Degree map. Please refer to the [Degree Map](#) website for future updates.

The B.S.P.H. major in Environmental Health Science features an interdisciplinary curriculum that integrates the environmental and health sciences with management and public policy. You will be trained to address pressing

environmental health problems and will be prepared for an impact career or for graduate study in public health or the traditional sciences. The environmental health science major also meets the core science requirements for pre-professionals in medicine and is an attractive option for other pre-professional students.

### Degree Map for Environmental Health Sciences

Beginning in the Fall of 2013, Degree maps were finalized for the 2012-2014 Bulletin years. Click Environmental Health Sciences to find the Degree map. Please refer to the [Degree Map](#) website for future updates.

Last Updated: October 2017

## Degree Programs

The Fairbanks School of Public Health currently offers two Bachelor of Science degrees, a Bachelor of Science in Public Health with concentrations in Community Health or Environmental Health Science and a Bachelor of Science in Health Services Management. For the most current information on Fairbanks School of Public Health Undergraduate Degree programs, please visit our school's website at: <https://fsph.iupui.edu/index.html>.

### Bachelor of Science in Health Data Science

Health data science is a burgeoning, interdisciplinary field requiring a diverse set of skills to extract knowledge and insights from data. Health data scientists will be at the center of an estimated \$300 billion value added to the American health sector annually by big data and analytics.

The Bachelor of Science in Health Data Science features an interdisciplinary curriculum that integrates biostatistics, computer science and informatics that will create an attractive package for employers working with health data locally, nationally and internationally. Students will receive either a minor in computer science from the Department of Computer and Information Science, or a minor in Informatics from the IU School of Informatics and Computing at IUPUI.

Please refer to the [Health Data Science curriculum](#) for more information.

### Bachelor of Science in Health Services Management

The Bachelor of Science in Health Services Management combines coursework in general education (communications, liberal arts, science, and quantitative methods), health care policy, finance and management to prepare students for positions in the health care arena in nonclinical work. The health care arena includes acute care, physician practice, and long-term care, insurance companies, and government. Positions are available in government and the private and not-for-profit sectors. Available positions include office manager, billing agent, project coordinator, HR recruiting specialist, marketing manager, claims adjudicator, clinical liaison, customer service representative, admissions staff, marketing specialist, and others.

Please refer to the [Health Services Management curriculum](#) for more information.

### Bachelor of Science in Public Health

The Bachelor of Science in Public Health (B.S.P.H.) degree combines coursework in communications, mathematics, the basic sciences (biology, chemistry, physics) and public health with an emphasis on protecting human health and the quality of the built and natural environment from environmental hazards through pollution prevention and control. Employment areas include indoor and outdoor pollution, water supply and wastewater treatment, solid and hazardous waste, workplace health and safety, general environmental health, childhood lead poisoning and asthma control, environmental health education, environmental toxicology and microbiology, sustainability, housing safety and vector control, food safety and defense, hazardous materials, homeland security, and others.

### **Community Health**

The B.S.P.H. major in Community Health will prepare students to provide health education, promote healthy lifestyles and healthy choices, prevent diseases, and enhance quality of life in communities. Students will obtain a foundation in understanding the social determinants of health, distribution of health and illness in diverse populations, and the disease risks among human populations. The Community Health major focuses on interdisciplinary efforts to address the physical, social, behavioral, mental, and environmental health concerns of communities and population at risk for disease and injury. Graduates will plan and evaluate health services in communities. They will coordinate the community efforts of government agencies and private organizations.

Please refer to the [Community Health curriculum](#) for more information.

### **Environmental Health Science**

The B.S.P.H. major in Environmental Health Science features an interdisciplinary curriculum that integrates the environmental and health sciences with management and public policy. You will be trained to address pressing environmental health problems and will be prepared for an impact career or for graduate study in public health or the traditional sciences. The environmental health science major also meets the core science requirements for pre-professionals in medicine and is an attractive option for other pre-professional students.

Please refer to the [Environmental Health Science curriculum](#) for more information.

Last Updated: October 2017

## **Public Health Degree Programs**

### **Bachelor of Science in Health Data Science**

Health data science is a burgeoning, interdisciplinary field requiring a diverse set of skills to extract knowledge and insights from data. Health data scientists will be at the center of an estimated \$300 billion value added to the American health sector annually by big data and analytics.

The Bachelor of Science in Health Data Science features an interdisciplinary curriculum that integrates biostatistics, computer science and informatics that will create an attractive package for employers working with health data locally, nationally and internationally. Students will receive either a minor in computer science from the Department of Computer and Information Science, or a

minor in Informatics from the IU School of Informatics and Computing at IUPUI.

### **Health Data Science Competencies**

Upon completing the Bachelor of Science in Health Data Science, you will be able to:

- Demonstrate computing knowledge and “hacking” skills (data capture and visualization)
- Analyze results using appropriate biostatistical methods (analytical skills)
- Think critically and creatively to solve problems and discover meaning in large data (open-mindedness, curiosity)
- Conduct biostatistical analyses in an ethical and responsible manner (professionalism)
- Effectively communicate results of analyses to non-experts (communication, “story telling”, presentation skills).

### **Academic Requirements**

Health Data Science majors must fulfill the IUPUI general education requirements corresponding the IUPUI's Statewide Transferrable General Education Core.

### **Health Data Science Public Health Core Courses**

Take four courses for 12 credits

- PBHL-A 316 Environmental Health Science (3 credits)
- PBHL-E 322 Introduction to Epidemiology (3 credits)
- PBHL-H 220 Policy and Management for Population Health (3 credits)
- PBHL-S 315 Community Health (3 credits)

### **Health Data Science Major Courses**

*Take all 9 courses and internships for 27 credits*

- PBHL-B 275 Probability for Health Data Scientists: A Computational Approach (3 credits)
- PBHL-B 280 Biostatistics for Health Data Scientists: A Computational Approach (3 credits)
- PBHL-B 285 Classical Biostatistical Regression Methods (3 credits)
- PBHL-B 385 Contemporary Biostatistical Regression Methods (3 credits)
- PBHL-B 401 Health Data Science Internship I (3 credits)
- PBHL-B 402 Health Data Science Internship II (3 credits)
- PBHL-B 420 Introduction to Biostatistical Learning (3 credits)
- PBHL-B 481 Introduction to Biostatistical Computing (3 credits)
- PBHL-B 490 Advanced Biostatistical Computing (3 credits)

### **Minor in Computer Science or Informatics**

#### **Computer and Information Science Minor**

Take six courses for 20 credits

- CSCI 23000 Computing I (4 credits)
- CSCI 24000 Computing II (4 credits)

- CSCI 34000 Discrete Computational Structures (3 credits)
- CSCI 36200 Data Structures (3 credits)
- CSCI 44300 Database Systems (3 credits)
- CSCI 48100 Data Mining (3 credits)

#### Required Informatics Electives:

- INFO-I 223 Data Fluency (3 credits)
- INFO-I 453 Computer and Information Ethics (3 credits)

#### OR

#### Informatics Minor

Take six courses for 21 credits

- INFO-I 101 Introduction to Informatics (4 credits)
- INFO-I 210 Information Infrastructure I (4 credits)
- INFO-I 211 Information Infrastructure II (4 credits)
- INFO-I 223 Data Fluency (3 credits)
- INFO-I 308 Information Representation (3 credits)
- INFO-I 453 Computer and Information Ethics (3 credits)

#### Required Computer Science Electives:

- CSCI 34000 Discrete Computational Structures (3 credits)
- CSCI 36200 Data Structures (3 credits)

#### Electives

Take up to five elective courses (15 or 16 credits credits), at least four from PBHL, CSCI or INFO up to a total of 120 credits.

- PBHL-B 452 Fundamentals of Data Management (3 credits)
- CSCI-N 241 Fundamentals of Web Development (3 credits)
- INFO-I 303 Organizational Informatics (3 credits)
- INFO-I 402 Informatics Project Management (3 credits)
- NEWM-N 220 Introduction to Media Application Development (3 credits)
- NEWM-N 230 Introduction to Game Design and Development (3 credits)
- COMM-C 180 Introduction to Inter-personal Communication (3 credits)
- COMM-C 223 Business and Professional Communication (3 credits)
- COMM-C 392 Health Communication (3 credits)

#### Degree Electives:

A minimum of 105 credit hours of required courses are listed for this curriculum. 39 credit hours are required in general education and preparatory courses and 12 required credit hours in public health. For those pursuing an informatics minor 53 credit hours are required in the major and minor areas. For those pursuing a computer science minor 54 credit hours are required in the major and minor areas. In addition, students must take a sufficient number of college-level elective courses to total a minimum of 120 credit hours. Contact the Office

of Student Services at (317) 278-0753 for specific determinations.

#### BSPH in Epidemiology

Epidemiology, the science of public and population health, is a field of disease detectives who conduct studies to better understand the health status of populations. Epidemiology studies describe the occurrence of disease in communities—who, what, when, where—and determine how and why disease occurs. The findings of these studies are then used to control and prevent disease and protect and improve the public's health.

Epidemiologists study all health phenomena, such as infectious diseases, cancer, heart disease, diabetes, maternal and child health, substance abuse, and injuries. They also work with policy makers, clinicians, and other health professionals to eliminate health disparities and improve health equity locally, nationally, and globally.

#### Competencies

A BSPH in epidemiology prepares students to enter the public health field as an entry-level epidemiologist responsible for carrying out a range of investigative and analytical epidemiologic activities related to the surveillance, detection, and prevention of diseases and injuries. Entry-level epidemiologists often work under the direction of a Senior Epidemiologist, conducting routine epidemiologic functions comprising surveillance, data collection, data analysis using basic epidemiologic methods, and assistance with epidemiologic investigations. This degree also provides excellent preparation for completing a Master of Public Health program. After completing the BSPH in epidemiology, students will be able to:

1. Assist in design of epidemiologic investigations and studies, including creating hypotheses and analysis plans
2. Apply descriptive and analytic epidemiologic methods to recognize public health problems pertinent to the population
3. Analyze data, summarize results, and draw conclusions from an epidemiologic investigation
4. Collaborate with others inside and outside the agency to identify and address public health problems
5. Identify public health surveillance data needs and support the evaluation of surveillance systems
6. Use identified informatics tools in support of epidemiologic practice
7. Develop an understanding of the social and behavioral determinants of health
8. Apply understanding of complex biological, environmental, and behavioral disease risk factors to determine potential mechanisms of disease
9. Assist in developing recommended evidence-based interventions and control measures in response to epidemiologic findings with appropriate cultural, social, and political frameworks

10. Prepare written and oral reports and presentations that communicate necessary information to professionals and the general public
11. Follow ethical, privacy, and confidentiality guidelines and principles when planning studies; conducting research; and collecting, disseminating, and using data

Students will also have opportunities to develop research skills, team work and leadership skills, and have international health experiences through additional coursework and practical opportunities.

### Academic Requirements

Epidemiology majors must fulfill the IUPUI general education requirements corresponding the IUPUI's Statewide Transferrable General Education Core.

### Epidemiology Major Courses

Take 18 courses for 54 credits

### Public Health Core Courses

Take all four courses

- PBHL-E 322 Principles of Epidemiology (3 credits)
- PBHL-A 316 Environmental Health Science (3 credits)
- PBHL-H 220 Policy and Management for Population Health (3 credits)
- PBHL-S 315 Community Health (3 credits)

### Epidemiology Core Courses

Take seven epidemiology core courses

- PBHL-E 210 Zombie Apocalypse and Other Doomsday Infections (3 credits)
- PBHL-E 330 Evidence-Based Writing for Public Health (3 credits)
- PBHL-E 303 Public Health Surveillance (3 credits)
- PBHL-E 323 Chasing Disease: Field Epidemiology (3 credits)
- PBHL-E 335 The Lurking Pandemic: Epidemiology of Chronic Diseases (3 credits)
- PBHL-E 391 Public Health Surveillance (3 credits)
- PBHL-E 421 Epidemiology Counts (3 credits)
- PBHL-E 422 Epidemiology: Beyond Basics (3 credits)
- PBHL-S 305 Careers in Public Health (3 credits)

Take seven of the following application courses

- PBHL-E 303 Public Health Informatics (3 credits)
- PBHL-E 303 Environmental Epidemiology (3 credits)
- PBHL-E 303 Epidemiology of Reproductive and Perinatal Health (3 credits)
- PBHL-E 395 Sores and Drips: Epidemiology of Sexually Transmitted Infections (3 credits)
- PBHL-E 333 Buzzed and Stoned: Epidemiology of Substance Abuse (3 credits)
- PBHL-E 375 Fundamentals of Injury Epidemiology (3 credits)
- PBHL-S 425 Social Determinants of Health
- PBHL-H 325 Health Information Technology Management and Policy (3 credits)
- PBHL-H 330 Global Public Health (3 credits)

- PBHL-H 450 Approved Study Abroad Courses Offered by PBHL (3 credits)
- PBHL-S 340 Cultural Competency in the Promotion of Public Health (3 credits)

One of the following applied experiences:

- PBHL-E 491 Capstone in Epidemiology (3 credits)
- PBHL-E 490 Internship in Epidemiology (3 credits)

### General Electives

A minimum 100 credit hours (46 credit hours General Education + 54 credit hours Epidemiology) of required courses are listed for this curriculum. In addition, students must take a sufficient number of elective courses to total a minimum of 120 credit hours.

### Accelerated Degrees

The Fairbanks School of Public Health offers high-performing students the option to obtain an undergraduate and master's degree in five years. Students will receive an immersive education that is in demand by employers.

Participation in this program allows students to begin graduate education their undergraduate senior year. Before starting any graduate classes, students are required to complete 96 credit hours including all general education requirements and general electives.

### BSPH in Global Health Protection

This degree prepares students to begin a career in health protection and injury/disease prevention; to apply to advanced degree programs in public health and related fields; or to prepare for further training the clinical health professions. With careful planning, this curriculum meets the basic science requirements for many of the clinical health professional programs at Indiana University, including medicine; these requisite courses vary by program and are subject to revision, so always check with the admissions officer of the professional program you are interested in pursuing.

The following degree requirements are required of all students majoring in Global Health Protection and are admitted to Indiana University beginning with fall 2017. Students who are returning to the Fairbanks School of Public Health (FSPH) after a leave of absence but have not enrolled in classes for three or more consecutive years will be required to follow these degree requirements.

Some courses in the major are not offered each semester. Students should contact the Office of Student Services (278-0753) in the FSPH for advising information, the course rotation, and to ensure that they will meet graduation requirements.

### Competencies

Upon completing this degree, you will be able to:

- Describe a framework to anticipate, recognize, evaluate, prevent, and control environmental exposures.
- Use analytical tools and methods to characterize and address environmental health issues.
- Practice critical thinking to characterize and address environmental health issues.

- Acquire experience in communicating effectively with diverse stakeholders – both written and oral, public and interpersonal, professional and technical – on environmental health issues.
- Classify human health effects of environmental exposures.
- Identify barriers to health equity related to environmental health.

### Academic Requirements

Environmental Health Science majors must fulfill the IUPUI general education requirements corresponding the IUPUI's Statewide Transferrable General Education Core.

### Global Health Protection Requirements

15 courses for a total of 49 credits

#### Foundations and Methods

11 courses for a total of 34 credits

Public Health Fundamentals - All of the following courses

- PBHL-A 316 Environmental Health Science (3 credits)
- PBHL-B 300 Introduction to Biostatistics (3 credits)
- PBHL-E 322 Principles of Epidemiology (3 credits)
- PBHL-H 220 Policy and Management for Population Health (3 credits)
- PBHL-S 315 Community Health (3 credits)

Health Protection Fundamentals - All of the following courses

- PBHL-A 310 Exposure Assessment Laboratory & Data Analysis (4 credits)
- PBHL-A 320 Prevention Strategies to Improve Population Health (3 credits)
- PBHL-A 325 Injury Prevention (3 credits)
- PBHL-A 330 Humans in Extreme Environments (3 credits)
- PBHL-A 404 Public Health Applications of Geographic Information Systems (3 credits)
- PBHL-A 410 Fundamentals of Toxicology (3 credits)

### Applications

4 courses for a total of 12 credits

Cornerstones of Health Protection Practice - One of the following courses

- PBHL-A 433 Occupational Health and Safety (3 credits)
- PBHL-A 428 Public Health Sanitation (3 credits)
- PBHL-A 440 Terrorism as a Public Health Threat (3 credits)

Contemporary Global Health Issues - One of the following courses

- PBHL-A 435 Energy, Climate Change, Resilience, and Health (3 credits)
- PBHL-A 445 Global Environmental Health and Sustainable Development (3 credits)
- PBHL-A 450 Food and Water: Safety, Scarcity, Security (3 credits)

Sustainability and Human Health - One of the following courses

- PBHL-A 430 E-waste, Toxic Materials, and Conflict Minerals (3 credits)
- PBHL-A 425 High Cost of Fashion: Environmental Hazards and Cheap Labor (3 credits)

Preparing for and Responding to Emergencies - One of the following courses

- PBHL-A 415 Explosions, Collapses, and Toxic Spills: Prevention and Response (3 credits)
- PBHL-A 420 Armed Conflict, Natural Disasters, and Health (3 credits)

### Experience

1 course for a total of 3 credits

- PBHL A380 Environmental Health Science Internship (3 credits)

### Recommended Electives

- PBHL-A 100 Environment and Human Health (3 credits)
- PBHL-A 120 Regional Cultures and Mortality (3 credits)
- CHEM-C 342 Organic Chemistry Lecture II (3 credits)
- CHEM-C 344 Organic Chemistry Laboratory II (2 credits)
- BIOL-K 483 Biological Chemistry (3 credits)
- BIOL-K 322 Genetics and Molecular Biology (3 credits)
- BIOL-K 324 Cell Biology (3 credits)
- BIOL-K 338 Introductory Immunology (3 credits)
- BUS-X 204 Business Communications (3 credits)
- COMM-C 223 Business and Professional Communication (3 credits)
- COMM-C 380 Organizational Communication (3 credits)
- EMER-E 201 Emergency Medical Technician – Basic (6 credits)
- ENG-W 290 Writing in the Arts and Sciences (3 credits)
- SOC-R 121 Social Problems (3 credits)
- SOC-R 317 Sociology of Work (3 credits)
- SOC-R 425 Gender and Work (3 credits)
- SOC-R 478 Formal Organizations (3 credits)
- SHRS-W 361 Health Promotion and Disease Prevention (3 credits)
- TCM 220 Technical Report Writing (3 credits)
- TCM 320 Written Communication in Science and Industry (3 credits)

Other public health courses

Other biology, chemistry, physics, or mathematics courses  
Other writing, communications, or foreign language courses

Other social science courses

Degree Electives: A minimum 114 credit hours (65 credit hours General Education + 49 credit hours Environmental Health Science) of required courses are listed for this curriculum. In addition, students must take a sufficient number of elective courses to total a minimum of 120

credit hours. We have provided some recommended electives above; please discuss elective courses with your academic advisor.

Last Updated: March 2020

## Bachelor of Science in Public Health - Community Health

A Bachelor of Science in Public Health (BSPH) in Community Health prepares students with the knowledge and skills needed to positively impact the health of individuals and communities. Through coursework and community-based learning experiences, students will learn how to apply the principles of social justice to improve a community's social and health outcomes. Students gain hands-on experience in community assessment, health intervention and program development, community organizing, communication, and advocacy. Students will be well trained to enter the public health workforce and will also be eligible to become a national Certified Health Education Specialist upon graduation.

### Competencies

Upon completion of the BSPH in Community Health program, graduates will be able to:

1. Recognize the structural and social determinants of health that affect individuals and communities.
2. Demonstrate an appreciation of social justice as the ethical framework for advancing community health.
3. Explain and apply the public health domains of epidemiology, biostatistics, environmental health, and health policy and management to the social and behavioral sciences domain.
4. Describe the historical role of public health nationally and globally, and identify and understand current and future public health challenges faced by the U.S. and the world.
5. Obtain, analyze, synthesize, and apply quality data for assessment and planning in community health programs.
6. Engage community stakeholders and organize communities to determine health priorities and plan effective community health interventions and programs.
7. Coordinate and monitor the delivery of community health interventions and programs.
8. Implement appropriate and equitized data collection and analysis procedures for evaluation and research related to community health promotion.
9. Develop appropriate and effective health promotion communication materials and messaging.
10. Communicate effectively with diverse individuals, communities, and stakeholders.
11. Advocate for evidence-based practices, programming, and policies that affect the health of individuals and communities.
12. Demonstrate an understanding of, and ability to apply ethical decision making and professionalism.

### Curriculum

To complete this degree, you will take a minimum of 35 credit hours of general education courses, 69 credit hours

of coursework in the major, and 16 credit hours of general electives that together total at least 120 credits. Major requirements can be mapped to fulfill requirements for pre-med and other pre-professional plans.

Students who are interested in this degree are encouraged to contact the Office of Student Services at (317) 274-2000. Our advisors can answer questions about degree requirements, eligible classes, course substitutions, and course waivers. We're here to help you.

### Community Health Curriculum

To complete this degree, you will take a minimum of 35 credit hours of General Education courses, 69 credit hours of coursework in the major, and 16 credit hours of general electives that together total at least 120 credits. The specific distribution of classes is as follows:

### Academic Requirements

Bachelor of Science in Public Health - Community Health majors must fulfill the IUPUI General education requirements corresponding the IUPUI's Statewide Transferrable General Education Core.

### Social and Behavioral Sciences Core (pick 3 Courses) - Minimum 9 Credit Hours

- PSY-B 110 Introduction to Psychology (3 credits)
- SOC-R 100 Introduction to Sociology (3 credits)
- GEOG-G 110 Human Geography in a Changing World (3 credits)
- ANTH-A 104 Cultural Anthropology (3 credits)

### Public Health Core Courses (5 Courses) - Minimum 15 Credit Hours

*Each of the Following five course:*

- PBHL-A 316 Environmental Health Science (3 credits)
- PBHL-H 120 Health Care Delivery in the US (3 credits)
- PBHL-S 305 Careers in Public Health (3 credits)
- PBHL-E 322 Principles of Epidemiology (3 credits)
- PBHL-E 330 Evidence-Based Writing in Public Health (3 credits)

### Community Health Courses

*Each of the following 12 Community Health core courses:*

- PBHL-S 220 Navigating the Maze to Healthy Living (3 credits)
- PBHL-S 315 Community Organizing for Health Promotion (3 credits)
- PBHL-S 330 Theoretical Foundations of Community Health (3 credits)
- PBHL-S 337 Health Equity and Social Determinants of Health (3 credits)
- PBHL-S 340 Cultural Considerations in the Promotion of Health (3 credits)
- PBHL-S 349 Research Methods in Community Health (3 credits)
- PBHL-S 360 Assessment and Planning for Community Health Promotion P: **S120, S330** (3 credits)

- PBHL-S 361 Implementation and Evaluation for Community Health Promotion **P: S360** (3 credits)
- PBHL-S 416 Health Promotion Application **P: S361** (3 credits)
- PBHL-S 460 Biosocial Approach to Global Health **P: S361, S315** (3 credits)
- PBHL-S 479 Internship in Community Health **P: Senior Standing, 2.5 GPA S361** (6 credits)
- PBHL-S 499 Capstone Experience-BSPH in Community Health (3 credits) **P: Must Be Last Semester; 2.5 GPA** (3 credits)
- **PBHL-S 469\* Practicum in Community Health**

\* Students can opt to complete **PBHL-S 469** and an additional general elective with permission

### Required Health Electives (5 Course) - 15 Credit Hours.

Required health electives are organized into groups. Select once course from each group from the options listed below.

Choose 1 course from each group for a total of 15 credit hours

#### Global Health Electives

Choose 1 course for a total of 3 credits

- PBHL-P 450 Healthcare Systems around the World - Any FSPH Public Health Study Abroad Program (3 credits)
- PBHL-H 330 Global Public Health (3 credits)
- PBHL-A 415 Explosions, Collapses, and Toxic Spills: Prevention and Response (3 credits)
- HLSC-H 250 Health and Rehabilitation Systems Across the World (3 credits)
- NTRD-D 460 Global Perspectives in Nutrition, Health, Disease, and Disability (3 credits)

#### Mental Health Electives

Choose 1 course for a total of 3 credits

- PBHL-S 222 This Stress is Killing Me: Stress and its Effects on You (3 credits)
- PBHL-S 325 Urban Angst and Suburban Blues: Public Mental Health (3 credits)
- SOC-R 485 Sociology of Mental Illness (3 credits)
- PBHL-H 315 High Risk Health Behaviors and Harm Reduction (3 credits)
- SOC-R 410 Alcohol, Drugs, and Society (3 credits)
- PBHL-E 333 Buzzed and Stoned: Epidemiology of Substance Abuse (3 credits)

#### Contemporary Issues Electives

Choose 1 course for a total of 3 credits

- PBHL-S 105 Public Health & Film (3 credits)
- PBHL-E 210 Zombie Apocalypse and Other Doomsday Infections (3 credits)
- PBHL-E 335 Pandemics Lurking in the Shadows: Epidemiology of Chronic Diseases (3 credits)
- PBHL-E 395 Sores, Drips: Epidemiology of Sexually Transmitted Diseases (3 credits)
- SOC-R 385 AIDS and Society (3 credits)

- HPER-H 305 Women's Health (3 credits)
- HLSC-H 220 Aging and the Older Person (3 credits)
- SOC-R 315 Sociology of Disability (3 credits)
- PBHL-A 325 Injury Prevention (3 credits)
- PBHL-A 330 Humans in Extreme Environments (3 credits)

#### Leadership and Management Electives

Choose 1 course for a total of 3 credits

- PBHL-H 361 Leadership in Health Management: Resolving Disputes and Difficult Conversations (3 credits)
- PBHL-H 375 Management of Health Service Organizations (3 credits)
- SPEA-V 263 Public Management (3 credits)
- SPEA-V 362 Nonprofit Management and Leadership (3 credits)
- SPEA-V 366 Managing Behaviors in Public Organizations (3 credits)

#### Skill Development Electives

Choose 1 course for a total of 3 credits

- PBHL-S 422 Coaching for Health and Wellness (3 credits)
- PBHL-A 441 Public Health Applications of Geographic Information Systems (3 credits)

#### General Electives

- Additional courses beyond the IUPUI Common Core, General Education, and Major requirements to total 120 credit hours.

#### Grade Point Average Requirement

In order to be admitted to this degree program a student must have earned a 2.5 undergraduate cumulative and previous semester GPA. In addition, students must maintain at least a 2.5 semester and cumulative grade point average (GPA) to remain in good academic standing and graduate from this program.

#### Accelerated 4 + 1 BSPH - MPH Curriculum Academic Requirements

Bachelor of Science in Public Health - Community Health majors must fulfill the IUPUI general education requirements corresponding the IUPUI's Statewide Transferrable General Education Core.

#### Community Health Major Courses:

#### Social and Behavioral Sciences Core (pick 3 courses)

- PSY-B 110 Introduction to Psychology (3 credits)
- SOC-R 100 Introduction to Sociology (3 credits)
- GEOG-G 110 Human Geography in a Changing World (3 credits)
- ANTH-A 104 Cultural Anthropology (3 credits)

#### Public Health Core Courses (5 Courses) - Minimum 15 Credit Hours

Each of the Following five courses:

- PBHL-A 316 Environmental Health Science (3 credits)
- PBHL-H 120 Health Care Delivery in the US (3 credits)
- PBHL-S 305 Careers in Public Health (3 credits)
- PBHL-E 322 Principles of Epidemiology (3 credits)
- PBHL-E 330 Evidence-Based Writing in Public Health (3 credits)

### Community Health Courses

Each of the following nine Community Health core courses:

- PBHL-S 220 Navigating the Maze to Healthy Living (3 credits)
- PBHL-S 315 Community Organizing for Health Promotion (3 credits)
- PBHL-S 330 Theoretical Foundations of Community Health (3 credits)
- PBHL-S 337 Health Equity and Social Determinants of Health (3 credits)
- PBHL-S 340 Cultural Considerations in the Promotion of Health (3 credits)
- PBHL-S 349 Research Methods in Community Health (3 credits)
- PBHL-S 360 Assessment and Planning for Community Health Promotion **P: S120, S330** (3 credits)
- PBHL-S 361 Implementation and Evaluation for Community Health Promotion **P: S360** (3 credits)
- PBHL-S 499 Capstone Experience-BSPH in Community Health (3 credits)

### Required Health Electives (3 Courses) - 9 Credit Hours.

Required health electives are organized into groups. Select three courses from three different groups.

### Global Health Electives (1 Course) - 3 Credit Hours

- PBHL-P 450 Healthcare Systems around the World - Any FSPH Public Health Study Abroad Program\*\* (3 credits)
- PBHL-H 330 Global Public Health (3 credits)
- PBHL-A 415 Explosions, Collapses, and Toxic Spills: Prevention and Response (3 credits)
- HLSC-H 250 Health and Rehabilitation Systems Across the World (3 credits)
- NTRD-N 460 Global Perspectives in Nutrition, Health, Disease, and Disability (3 credits)

### Contemporary Issues Electives (1 Course) - 3 Credits

- PBHL-S 105 Music, Movies, and Public Health (3 credits)
- PBHL-E 210 Zombie Apocalypse and Other Doomsday Infections (3 credits)
- PBHL-E 335 Pandemics Lurking in the Shadows: Epidemiology of Chronic Diseases (3 credits)
- PBHL-E 395 Sores, Drips: Epidemiology of STI's (3 credits)
- SOC-R 385 AIDS and Society (3 credits)
- HPER-H 305 Women's Health (3 credits)
- HLSC-H 220 Aging and the Older Person (3 credits)

- PBHL-A 325 Injury Prevention (3 credits)
- PBHL-A 330 Humans in Extreme Environments (3 credits)

### Skill Development Electives (1 Course) - 3 Credit Hours

- PBHL-S 422 Coaching for Health and Wellness (3 credits)
- PBHL-A 441 Public Health Applications of Geographic Information Systems (GIS) (3 credits)

### MPH-SBS Year 1

All of the following courses:

- PBHL-P 510 Introduction to Public Health (3 credits)
- PBHL-P 511 Comprehensive Methods and Applications in Biostatistics and Epidemiology (3 credits)
- PBHL-S 617 Health Promotion & Disease Prevention (3 credits)
- PBHL-S 605 Public Health Biology (1 credit)
- PBHL-S 619 Health Disparities and Health Equity (3 credits)
- PBHL-P 513 Planning, Evaluation & Management in Public Health (3 credits)
- PBHL-P 512 Communication & Leadership in Public Health (3 credits)
- PBHL-S 602 Public Health/SBS Internship (3 credits)
- PBHL-S 620 A Biopsychosocial Approach to Stress (3 credits)

### MPH-SBS Year 2

All of the following courses:

- PBHL-S 615 Public Health Qualitative Methods (3 credits)
- PBHL-S 662 Integrated Learning Experience 1: Advanced Program Planning (4 credits)
- PBHL-S 630/S622 Global Maternal & Child Health **OR** Coaching for Health Behavior Change (3 credits)
- PBHL-S 664 Integrated Learning Experience 2: Research Methods & Program Evaluation (4 credits)
- PBHL-S 625/S635 Applied Public Health Campaigns **OR** Biosocial Approach to Global Health (3 credits)
- PBHL-S 640/S635 Culture & Health **OR** Biosocial Approach to Global Health (3 credits)

Updated February 9, 2022

## BSHSM Bachelor of Science in Health Services Management

The Bachelor of Science in Health Services Management at the IU Richard M. Fairbanks School of Public Health prepares students for 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, insurance companies, and more.

### Health Services Management competencies

The Bachelor of Science in Health Services Management at the IU Richard M. Fairbanks School of Public Health prepares students for 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, insurance companies, and more. After completing the Bachelor of Science in Health Services Management, students will be able to:

#### Domain One: Communication and Relationship Management

1. Build and manage relationships with peers, faculty, alumni and healthcare professionals.
2. Communicate information and ideas in a clear, concise, organized, and effective manner for the intended audience in writing (i.e. reports, emails, and briefs) and through presentations.
3. Collaborate in diverse teams utilizing interpersonal skills, recognizing and demonstrating sensitivity to diverse points of view.

#### Domain Two: Professionalism

4. Carry oneself in a professional manner that aligns with ethical, legal and professional standards.

#### Domain Three: Leadership

5. Develop leadership skills including: self-awareness, conflict management, resilience, adaptability, influence, initiative, and accountability.

#### Domain Four: Knowledge of the Healthcare System

6. Describe the structure and functioning of health delivery, public health, and health services organizations and the importance of a population health perspective.

#### Domain Five: Business Skills and Knowledge

7. Apply quality, strategic planning, management, organizational behavior and human resource theories and tools to manage organizational resources, confront challenges and improve outcomes in health organizations.
8. Examine marketing principles and understand how they are utilized to increase growth of a health organization's market share.
9. Explain how data and health information technology are used to improve organizational performance and population health.
10. Utilize financial tools, principles and practices to analyze budgets and financial documents to determine the financial performance of health services organizations.

### Academic requirements

Health Services Management majors must fulfill the IUPUI general education requirements corresponding the IUPUI's Statewide Transferrable General Education Core.

### Health Services Management requirements

Take 24 courses for a total of 71 credits.

#### Introduction

Take three courses for a total of 9 credits

- PBHL P109 Introduction to Public Health - Why Public Health Matters (3 credits)
- PBHL H120 Health Care Delivery in the US (3 credits)
- PBHL H101 Influencing the Public's Health (3 credits)

#### Technology, Writing and Marketing

Take three courses for a total of 9 credits

- PBHL H245 Professionalism in the Health Care Workplace (3 credits)
- PBHL H325 Health Information Technology, Management and Policy (3 credits)
- PBHL H432 Health Care Marketing (3 credits)

#### Accounting, Finance and Economics

Take four courses for a total of 12 credits

- PBHL H200 Healthcare Accounting (3 credits)
- PBHL H352 Health Finance and Budgeting (3 credits)
- PBHL H353 Advanced Health Finance and Budgeting (3 credits)
- PBHL H354 Healthcare Economics (3 credits)

#### Management, Operations and Organizational Behavior

Take four courses for a minimum of 12 credits

- PBHL H320 Health Systems Administration (3 credits)
- PBHL H345 Operations Management and Quality Improvement in Health Organizations (3 credits)
- PBHL H346 Organizational Behavior and HR Management in Health Organizations (3 credits)
- PBHL H375 Management of Health Care Organizations (3 credits)

#### Leadership, Strategic Planning and Ethics

Take three courses for a minimum of 9 credits

- PBHL H361 Leadership in Health Management (3 credits)
- PBHL H401 Strategic Planning for Health Care Organizations (3 credits)
- PBHL H474 Health Administration Ethics Seminar (3 credits)

#### Professional Experience and Capstone

Take two courses for a minimum of 6 credits

- PBHL H379 Career Preparation in Health Services Management (3 credits)
- PBHL H475 Health Services Management Capstone (3 credits)

## Health Services Management Applications

Take five courses for a minimum of 15 credits

Take four courses from Group A and one course from Group B or all five courses from Group A. When selecting a Topics course, be sure to check that the topic is approved by the BSHSM program.

### Group A

- PBHL-H 305 Medical Group Management (3 credits)
- PBHL-H 310 Lean in Healthcare (3 credits)
- PBHL-H 315 High Risk Health Behaviors and Harm Reduction (3 credits)
- PBHL-H 330 Global Public Health (3 credits)
- PBHL-H 380 Internship in Health Services Management (3 credits)
- PBHL-H 411 Chronic and Long-term Care Administration (3 credits)
- PBHL-H 420 Health Policy (3 credits)
- PBHL-H 441 Legal Aspects of Healthcare Administration (3 credits)
- PBHL-H 303 Topics in PBHL (3 credits)
- PBHL-H 404 Topics in PBHL (3 credits)
- PBHL-P 400, 450, 455 Health Systems Around the World - Study Abroad (3 credits)

### Group B

- PBHL-A 316 Environmental Health Science (3 credits)
- PBHL-E 322 Principles of Epidemiology (3 credits)
- PBHL-S 250 Social and Behavioral Dimensions of Public Health (3 credits)

Updated: April 2023

## BSPH-EPI Bachelor of Science in Public Health - Epidemiology

Epidemiology, the science of public and population health, is a field of disease detectives who conduct studies to better understand the health status of populations.

Epidemiology studies describe the occurrence of disease in communities—who, what, when, where—and determine how and why disease occurs. The findings of these studies are then used to control and prevent disease and protect and improve the public's health.

Epidemiologists study all health phenomena, such as infectious diseases, cancer, heart disease, diabetes, maternal and child health, substance abuse, and injuries. They also work with policy makers, clinicians, and other health professionals to eliminate health disparities and improve health equity locally, nationally, and globally.

### Competencies

A BSPH in epidemiology prepares students to enter the public health field as an entry-level epidemiologist responsible for carrying out a range of investigative and analytical epidemiologic activities related to the surveillance, detection, and prevention of diseases and injuries. Entry-level epidemiologists often work under the direction of a Senior Epidemiologist, conducting routine epidemiologic functions comprising

surveillance, data collection, data analysis using basic epidemiologic methods, and assistance with epidemiologic investigations. This degree also provides excellent preparation for completing a Master of Public Health program. After completing the BSPH in epidemiology, students will be able to:

1. Assist in design of epidemiologic investigations and studies, including creating hypotheses and analysis plans
2. Apply descriptive and analytic epidemiologic methods to recognize public health problems pertinent to the population
3. Analyze data, summarize results, and draw conclusions from an epidemiologic investigation
4. Collaborate with others inside and outside the agency to identify and address public health problems
5. Identify public health surveillance data needs and support the evaluation of surveillance systems
6. Use identified informatics tools in support of epidemiologic practice
7. Develop an understanding of the social and behavioral determinants of health
8. Apply understanding of complex biological, environmental, and behavioral disease risk factors to determine potential mechanisms of disease
9. Assist in developing recommended evidence-based interventions and control measures in response to epidemiologic findings with appropriate cultural, social, and political frameworks
10. Prepare written and oral reports and presentations that communicate necessary information to professionals and the general public
11. Follow ethical, privacy, and confidentiality guidelines and principles when planning studies; conducting research; and collecting, disseminating, and using data

Students will also have opportunities to develop research skills, team work and leadership skills, and have international health experiences through additional coursework and practical opportunities.

### Academic Requirements

Bachelor of Science in Public Health- Epidemiology majors must fulfill the IUPUI general education requirements corresponding the IUPUI's Statewide Transferrable General Education Core.

### Epidemiology Major Courses

Take 18 courses for 54 credits

### Public Health Core Courses

Take all four courses

- PBHL-E 322 Principles of Epidemiology (3 credits)
- PBHL-A 316 Environmental Health Science (3 credits)
- PBHL-H 220 Policy and Management for Population Health (3 credits)
- PBHL-S 315 Community Health (3 credits)

## Epidemiology Core Courses

Take seven epidemiology core courses

- PBHL-E 210 Zombie Apocalypse and Other Doomsday Infections (3 credits)
- PBHL-E 330 Evidence-Based Writing for Public Health (3 credits)
- PBHL-E 323 Chasing Disease: Field Epidemiology (3 credits)
- PBHL-E 335 The Lurking Pandemic: Epidemiology of Chronic Diseases (3 credits)
- PBHL-E 391 Public Health Surveillance (3 credits)
- PBHL-E 421 Epidemiology Counts (3 credits)
- PBHL-E 422 Epidemiology: Beyond Basics (3 credits)
- PBHL-S 305 Careers in Public Health (3 credits)

Take seven of the following application courses

- PBHL-E 303 Public Health Informatics (3 credits)
- PBHL-E 303 Environmental Epidemiology (3 credits)
- PBHL-E 303 Epidemiology of Reproductive and Perinatal Health (3 credits)
- PBHL-E 395 Sores and Drips: Epidemiology of Sexually Transmitted Infections (3 credits)
- PBHL-E 333 Buzzed and Stoned: Epidemiology of Substance Abuse (3 credits)
- PBHL-E 375 Fundamentals of Injury Epidemiology (3 credits)
- PBHL-E 337 Health Equity and Social Determinants of Health (3 credits)
- PBHL-A 441 Health Information Technology Management and Policy
- PBHL-S 425 Social Determinants of Health
- PBHL-H 325 Health Information Technology Management and Policy (3 credits)
- PBHL-H 330 Global Public Health (3 credits)
- PBHL-P 450 Approved Study Abroad Courses Offered by PBHL (3 credits)
- PBHL-S 340 Cultural Competency in the Promotion of Public Health (3 credits)

One of the following applied experiences:

- PBHL-E 491 Capstone in Epidemiology (3 credits)
- PBHL-E 490 Internship in Epidemiology (3 credits)

## General Electives

A minimum 100 credit hours (46 credit hours General Education + 54 credit hours Epidemiology) of required courses are listed for this curriculum. In addition, students must take a sufficient number of elective courses to total a minimum of 120 credit hours.

## BSPH-Epidemiology Pre-Professional Curriculum

The pre-professional BSPH in Epidemiology is a four-year undergraduate degree that combines the STEM coursework required for many professional schools, including medicine, and is founded on the public health and epidemiological methods of the BSPH in Epidemiology. As the [Association of American Medical Colleges](#) states, "It's never too early to start incorporating public health into your career." Together, public health and the professional health sciences, such as medicine,

dentistry, and veterinary sciences, work to improve population health around the world.

In this program, students learn how to study and address the determinants of health and illness from the cellular-level all the way up to entire populations, including how to prevent and control infectious and chronic diseases. Additionally, the IU Richard M. Fairbanks School of Public Health is ideally located at the core of the state of Indiana near five major health systems, the state department of health, the largest local health department in the state of Indiana, and several research institutes, providing students with ample opportunities for community involvement, internships, and research.

## Academic Requirements

Bachelor of Science in Public Health- Epidemiology majors must fulfill the IUPUI general education requirements corresponding the IUPUI's Statewide Transferrable General Education Core.

Take 15 courses for 45 credits

## Public Health Core Courses

Take all four courses

- PBHL-E 322 Principles of Epidemiology (3 credits)
- PBHL-A 316 Environmental Health Science (3 credits)
- PBHL-H 120 Health Care Delivery in the US (3 credits) or PBHL-H 220 Policy and Management for Population Health (3 credits)
- PHBL-S 315 Community Organizing for Health Promotion (3 credits)

## Epidemiology Core Courses

Take six epidemiology core courses

- PBHL-E 303 Evidence-Based Writing for Public Health (3 credits)
- PBHL-E 323 Chasing Disease: Field Epidemiology (3 credits)
- PBHL-E 335 Pandemics Lurking in the Shadows: Epidemiology of Chronic Diseases (3 credits)
- PBHL-E 391 Public Health Surveillance (3 credits)
- PBHL-E 421 Epidemiology Counts (3 credits)
- PBHL-E 422 Advanced Epidemiology (3 credits)

Take five of the following application courses

- PBHL-E 210 Zombie Apocalypse and Other Doomsday Infections (3 credits)
- PBHL-E 303 Public Health Informatics (3 credits)
- PBHL-E 303 Environmental Epidemiology (3 credits)
- PBHL-E 303 Epidemiology of Reproductive and Perinatal Health (3 credits)
- PBHL-E 303 Sores and Drips: Epidemiology of Sexually Transmitted Infections (3 credits)
- PBHL-E 333 Buzzed and Stoned: Epidemiology of Substance Abuse (3 credits)
- PBHL-E 395 Fundamentals of Injury Epidemiology (3 credits)

One of the following applied experiences:

- PBHL-E 491 Capstone in Epidemiology (3 credits)

- PBHL-E 490 Internship in Epidemiology (3 credits)

### General Electives

Degree Electives: A minimum 118 credit hours (73 credit hours General Education + 45 credit hours Epidemiology) of required courses are listed for this curriculum. In addition, students must take a sufficient number of elective courses to total a minimum of 120 credit hours.

### Accelerated Degrees

The Fairbanks School of Public Health offers high-performing students the option to obtain an undergraduate and master's degree in five years. Students will receive an immersive education that is in demand by employers.

Participation in this program allows students to begin graduate education their undergraduate senior year. Before starting any graduate classes, students are required to complete 96 credit hours including all general education requirements and general electives.

### Plan of Study

Students complete three years of bachelor's degree requirements. During their third year, they apply for the accelerated program. If accepted into the accelerated program, students complete their first year of MPH coursework during what would have been their fourth year of undergraduate study. That MPH coursework takes the place of their final BSPH required courses. The student then graduates with their bachelor's degree the spring after their first year in the MPH program.

### Academic Requirements

Bachelor of Science in Public Health- Epidemiology majors must fulfill the IUPUI general education requirements corresponding the IUPUI's Statewide Transferrable General Education Core.

### Accelerated 4+1 BSPH-Epidemiology - MPH Curriculum

*Take 18 courses for 54 credits*

#### Public Health Core Courses

Take all four courses

- PBHL-E 322 Principles of Epidemiology (3 credits)
- PBHL-A 316 Environmental Health Sciences (3 credits)
- PBHL-H 220 Policy and Management for Population Health
- PBHL-S 315 Community Health (3 credits)

#### Epidemiology Core Courses

*Take eight epidemiology core courses*

- PBHL-E 210 Zombie Apocalypse and Other Doomsday Infections (3 credits)
- PBHL-E 330 Evidence-Based Writing for Public Health (3 credits)
- PBHL-E 391 Public Health Surveillance (3 credits)
- PBHL-E 323 Chasing Disease: Field Epidemiology (3 credits)
- PBHL-E 335 The Lurking Pandemic: Epidemiology of Chronic Diseases (3 credits)

- PBHL-E 421 Epidemiology Counts (3 credits)
- PBHL-E 422 Epidemiology: Beyond Basics (3 credits)
- PBHL-S 250 Social and Behavioral Dimensions of Public Health (3 credits)

*Take seven of the following application courses*

- PBHL-E 303 Public Health Informatics (3 credits)
- PBHL-E 303 Environmental Epidemiology (3 credits)
- PBHL-E 303 Epidemiology of Reproductive and Perinatal Health (3 credits)
- PBHL-E 303 Sores and Drips: Epidemiology of Sexually Transmitted Infections (3 credits)
- PBHL-E 333 Buzzed and Stoned: Epidemiology of Substance Abuse (3 credits)
- PBHL-E 395 Fundamentals of Injury Epidemiology (3 credits)

### Approved MPH Course Substitutions

- PBHL-P 511 Comprehensive Methods in Biostatistics and Epidemiology (3 credits)
- PBHL-P 510 Introduction to Public Health (3 credits)
- PBHL-P 513 Planning and Management in Public Health (3 credits)
- PBHL-P 512 Leadership and Management in Public Health (3 credits)
- PBHL-B 670 Data Management (3 credits)

### Electives

A minimum 100 credit hours (46 credit hours General Education + 54 credit hours Epidemiology) of required courses are listed for this curriculum. In addition, students must take a sufficient number of elective courses to total a minimum of 120 credit hours.

### Master of Public Health - Applied Epidemiology Courses

- PBHL-P 511 Quantitative and Qualitative Methods (3 credits)
- PBHL-P 510 Introduction to Public Health (3 credits)
- PBHL-B 552 Fundamentals of Data Management (3 credits)
- PBHL-E 601 Advanced Epidemiology (3 credits)
- PBHL-P 512 Leadership and Management in Public Health (3 credits)
- PBHL-P 513 Planning and Management in Public Health (3 credits)
- PBHL-E 602 Public Health Internship in Epidemiology (3 credits)
- PBHL-E 711 Applied Epidemiological Methods I (3 credits)
- PBHL-B 562 Biostatistics for Public Health II (3 credits)
- PBHL-E 712 Applied Epidemiological Methods II (3 credits)
- PBHL-E 635 Foundations in Public Health Informatics (3 credits)
- PBHL-E Graduate Level Epidemiology Elective (3 credits)
- PBHL-E Graduate Level Epidemiology Elective (3 credits)

- PBHL-E Graduate Level Epidemiology Elective (3 credits)
- PBHL-E Graduate Level Epidemiology Elective (3 credits)

### Eligibility

The accelerated program is a competitive opportunity for outstanding public health students. To be eligible, students must have a minimum cumulative GPA of 3.5 and a B or higher in the following courses – PBHL-P109, PBHL-B300, PBHL-E330 (Evidence-Based Public Health), PBHL-E322, and PBHL-E422.

Prior to the start of their senior year, the student must have all but five major applications courses completed for their BSPH degree, these courses will be replaced with MPH courses taken the first year of the MPH program or last year of the BSPH program.

Students who meet the above criteria are not guaranteed admission. All elements of the application including letters of recommendation, scores, GPA, resume, interview and personal statement will be taken into consideration.

### When to Apply

Students are encouraged to apply during the spring semester of their Junior year, however, the deadline for accelerated BSPH-MPH applications is June 1. Accepted BSPH-MPH accelerated students will matriculate into the MPH program during the Fall semester of their senior year.

### Academic Requirements

Bachelor of Science in Public Health- Epidemiology majors must fulfill the IUPUI general education requirements corresponding the IUPUI's Statewide Transferrable General Education Core.

### Pre-Professional Accelerated 4+1 BSPH-MPH Curriculum

#### Epidemiology Major Courses

*Take all 15 courses for 45 credits*

#### Public Health Core Courses

*Take all four courses*

- PBHL-E 322 Principles of Epidemiology (3 credits)
- PBHL-A 316 Environmental Health Science (3 credits)
- PBHL-H 220 Policy and Management for Population Health (3 credits)
- PBHL-S 315 Community Health (3 credits)

#### Epidemiology Core Courses

*Take six epidemiology core courses*

- PBHL-E 210 Zombie Apocalypse and Other Doomsday Infections (3 credits)
- PBHL-E 303 Evidence-Based Writing for Public Health (3 credits)
- PBHL-E 303 Public Health Surveillance (3 credits)
- PBHL-E 323 Chasing Disease: Field Epidemiology (3 credits)

- PBHL-E 335 Pandemics Lurking in the Shadows: Epidemiology of Chronic Diseases (3 credits)
- PBHL-E 391 Public Health Surveillance (3 credits)
- PBHL-E 421 Epidemiology Counts (3 credits)
- PBHL-E 422 Epidemiology: Beyond Basics (3 credits)

### Epidemiology Application Courses

*Take five epidemiology application courses*

- PBHL-E 491 Capstone in Epidemiology (3 credits) OR
- PBHL-E 490 Internship in Epidemiology (3 credits)
- PBHL-E 303 Public Health Informatics (3 credits)
- PBHL-E 303 Environmental Epidemiology (3 credits)
- PBHL-E 303 Epidemiology of Reproductive and Perinatal Health (3 credits)
- PBHL-E 303 Sores and Drips: Epidemiology of Sexually Transmitted Infections (3 credits)
- PBHL-E 333 Buzzed and Stoned: Epidemiology of Substance Abuse (3 credits)
- PBHL-E 395 Fundamentals of Injury Epidemiology (3 credits)

*Approved MPH Course Substitutions*

- PBHL-P 511 Comprehensive Methods in Biostatistics and Epidemiology (3 credits)
- PBHL-P 510 Introduction to Public Health (3 credits)
- PBHL-P 513 Planning and Management in Public Health (3 credits)
- PBHL-P 512 Leadership and Management in Public Health (3 credits)
- PBHL-B 670 Data Management (3 credits)

### General Electives

A minimum 118 credit hours (73 credit hours General Education + 45 credit hours Epidemiology) of required courses are listed for this curriculum. In addition, students must take a sufficient number of elective courses to total a minimum of 120 credit hours.

### Master of Public Health-Applied Epidemiology Courses

- PBHL-P 511 Comprehensive Methods in Biostatistics and Epidemiology (3 credits)
- PBHL-P 510 Introduction to Public Health (3 credits)
- PBHL-B 552 Fundamentals of Data Management (3 credits)
- PBHL-E 601 Advanced Epidemiology (3 credits)
- PBHL-P 512 Leadership and Management in Public Health (3 credits)
- PBHL-P 513 Planning and Management in Public Health (3 credits)
- PBHL-E 602 Public Health Internship in Epidemiology (3 credits)
- PBHL-E 711 Applied Epidemiological Methods I (3 credits)
- PBHL-B 562 Biostatistics for Public Health II (3 credits)
- PBHL-E 712 Applied Epidemiological Methods II (3 credits)
- PBHL-E 635 Foundations in Public Health Informatics (3 credits)

- PBHL-E Graduate Level Epidemiology Elective (3 credits)
- PBHL-E Graduate Level Epidemiology Elective (3 credits)
- PBHL-E Graduate Level Epidemiology Elective (3 credits)
- PBHL-E Graduate Level Epidemiology Elective (3 credits)

Updated March 29, 2022

## BSPH-GH

### BSPH - Global Health

This degree prepares students to begin a career in Global Health; to apply to advanced degree programs in public health and related fields; or to prepare for global/international professions. Our program and courses prepare students with a broad, contemporary foundation of knowledge, skills and abilities relevant to global health. This includes attention to public health across low, middle- and high-income countries as well as the social, economic, political, and organizational conditions that comprise the environmental backdrop for health and well-being. We place particular emphasis on the most urgent and important global health challenges of our time, including climate change, environmental injustices, infectious diseases, socioeconomic inequalities and associated health disparities, increased nationalism, systemic racism, and more, many of which are due to successes in science and technology that have accelerated globalization and demographic shifts.

The following degree requirements are required of all students majoring in Global Health that are admitted to the Fairbanks School of Public Health (FSPH) beginning with fall 2021. Students who are returning to the FSPH and have not enrolled in classes for 2 major (fall or spring) semesters will be required to follow the current degree requirements.

Some courses in the major are not offered each semester. Students should contact the FSPH Office of Student Services (317-278-0753) for advising information, course rotation, and to ensure that they will meet graduation requirements.

Students enrolled in this major are eligible for special scholarship and internship opportunities. For more information, contact your academic advisor in the Department of Global Health.

### Competencies

Upon completing this degree, you will be able to:

- Describe a framework to anticipate, recognize, evaluate, prevent, and control environmental exposures.
- Use analytical tools and methods to characterize and address environmental health issues.
- Practice critical thinking to characterize and address environmental health issues.
- Acquire experience in communicating effectively with diverse stakeholders – both written and oral, public and interpersonal, professional and technical – on environmental health issues.
- Classify human health effects of environmental exposures.

- Identify barriers to health equity related to environmental health.

### Academic Requirements

Environmental Health Science majors must fulfill the IUPUI general education requirements corresponding the IUPUI's Statewide Transferrable General Education Core.

### Global Health Requirements

19 courses for a total of 57 credits

### Global Health General Education

Take 3 courses for a total of 9 credit hours

- PBHL-A 115 What's in your Back Yard? Environment and Health (3 credits)
- PBHL-A 140 Preparing for Disasters (3 credits)
- PBHL-A 215 Storytelling with Data (3 credits)

### Foundations

15 courses for a total of 45 credits

### Public Health Fundamentals

Take 5 courses for a total of 15 credit hours

- PBHL-A 316 Environmental Health Science (3 credits)
- PBHL-E 322 Principles of Epidemiology (3 credits)
- PBHL-H 120 Health Care Delivery in the US (3 credits)
- PBHL-S 250 Social and Behavioral Dimensions of Public Health (3 credits)
- PBHL-S 305 Careers in Public Health (3 credits)

### Global Health Core

Take 10 courses for a total of 30 credits

- PBHL-A 320 Prevention Strategies to Improve Population Health (3 credits)
- PBHL-A 441 Public Health Applications of Geographic Information Systems (3 credits)
- PBHL-A 435 Energy, Climate Change, Resilience, and Health (3 credits)
- PBHL-A 445 Global Environmental Health and Sustainable Development (3 credits)
- PBHL-A 415 Explosions, Collapses, and Toxic Spills: Prevention and Response (3 credits)
- PBHL-A 450 Food and Water: Safety, Scarcity, Security (3 credits)
- PBHL-A 45X Public Health Study Abroad Programming\* (3 credits)
- PBHL-A 428 Public Health Sanitation (3 credits)
- PBHL-A 420 Armed Conflict, Natural Disasters, and Health (3 credits)
- SPEA-V 310 Environmental Justice (3 credits)

### Experience

1 course for a total of 3 credits

- PBHL A380 Global Health Internship (3 credits)

## Recommended Electives

Take 4 courses for a total of 12 credits

- PBHL-A 404 At War with the Virus: Coping with COVID-19 (3 credits)
- PBHL-H 330 Global Public Health (3 credits)
- PBHL-S 337 Health Equity and Social Determinants of Health (3 credits)
- PBHL-H 420 Health Policy (3 credits)
- one approved course on Foreign language (3 credits)

We have provided some recommended electives above; please discuss elective courses with your academic advisor.

## Internships and Research Opportunities

Global Health majors are required to complete 240 hours of internship experience. This connects you to the community and is an excellent way to gain work experience and professional networks to launch your career.

Last Updated March 2022

## Bachelor of Science in Health Data Science

### Bachelor of Science in Health Data Science

Health data science is a burgeoning, interdisciplinary field requiring diverse skills to extract knowledge and insights from data. Health data scientists will be at the center of an estimated \$300 billion value added to the American health sector annually by big data and analytics.

The Bachelor of Science in Health Data Science features an interdisciplinary curriculum that integrates biostatistics, computer science, and informatics to create an attractive package for employers working with health data locally, nationally, and internationally. Students will receive either a minor in computer science from the Department of Computer and Information Science, or a minor in informatics from the IU School of Informatics and Computing at IUPUI.

### Minors

In addition to its focus on health, and the deep analytical skills obtained through the Health Data Science curriculum, a unique characteristic of the degree is the availability of minors in computer science or informatics.

### Computer Science

The minor in Computer and Information Science will focus on the use and modification of sophisticated software tools to provide students with the computational background necessary in developing the deep analytical capabilities necessary in their careers. This minor requires taking INFO-I453 and INFO-I425.

### Informatics

The minor in Informatics will focus on combining principles from information systems, computer science,

psychology, and sociology, to prepare students to tackle the challenges found in the health sciences. This minor requires taking CSCI-34000 and CSCI-36200.

### Health Data Science competencies

Upon completing the Bachelor of Science in Health Data Science, you will be able to:

- Demonstrate computing knowledge and “hacking” skills (data capture and visualization)
- Analyze results using appropriate biostatistical methods (analytical skills)
- Think critically and creatively to solve problems and discover meaning in large data (open-mindedness, curiosity)
- Conduct biostatistical analyses ethically and responsibly (professionalism)
- Effectively communicate results of analyses to non-experts (communication, “story telling”, presentation skills)

### Curriculum

To complete this degree, you will take a combination of general education courses, HDS required courses, HDS core courses, and a minor in computer science or informatics that together total at least 120 credits.

Students who are interested in this degree are encouraged to contact the IU Richard M. Fairbanks School of Public Health Office of Student Services at (317) 274-2000 to speak with one of our friendly, helpful advisors who can answer questions about degree requirements, eligible classes, course substitutions, and course waivers. We're here to help students successfully complete the program.

### Academic requirements

Health Data Science majors must fulfill the IUPUI general education requirements corresponding to IUPUI's Statewide Transferrable General Education Core.

### Health Data Science Public Health core courses

Take two courses for 6 credits

- PBHL-A 316 Environmental Health Science (3 credits)
- PBHL-E 322 Introduction to Epidemiology (3 credits)

### Health Data Science major courses

Take all nine courses and internships for 27 credits

- PBHL-B 275 Probability for Health Data Scientists: A Computational Approach (3 credits)
- PBHL-B 280 Biostatistics for Health Data Scientists: A Computational Approach (3 credits)
- PBHL-B 285 Classical Biostatistical Regression Methods (3 credits)
- PBHL-B 385 Contemporary Biostatistical Regression Methods (3 credits)
- PBHL-B 401 Health Data Science Internship I (3 credits)
- PBHL-B 402 Health Data Science Internship II (3 credits)

- PBHL-B 420 Introduction to Biostatistical Learning (3 credits)
- PBHL-B 481 Introduction to Biostatistical Computing (3 credits)
- PBHL-B 490 Advanced Biostatistical Computing (3 credits)

### Minor in Computer Science or Informatics

#### Computer and Information Science minor

Take six courses for 20 credits

- CSCI 23000 Computing I (4 credits)
- CSCI 24000 Computing II (4 credits)
- CSCI 34000 Discrete Computational Structures (3 credits)
- CSCI 36200 Data Structures (3 credits)
- CSCI 44300 Database Systems (3 credits)
- CSCI 48100 Data Mining (3 credits)

Required Informatics electives:

- INFO-I 223 Data Fluency (3 credits)
- INFO-I 453 Computer and Information Ethics (3 credits)

**OR**

#### Informatics minor

Take six courses for 21 credits

- INFO-I 101 Introduction to Informatics (4 credits)
- INFO-I 210 Information Infrastructure I (4 credits)
- INFO-I 211 Information Infrastructure II (4 credits)
- INFO-I 223 Data Fluency (3 credits)
- INFO-I 308 Information Representation (3 credits)
- INFO-I 453 Computer and Information Ethics (3 credits)

Required Computer Science electives:

- CSCI 34000 Discrete Computational Structures (3 credits)
- CSCI 36200 Data Structures (3 credits)

#### Electives

Take up to seven elective courses (21 or 22 credits), at least four from PBHL, CSCI or INFO up to a total of 120 credits.

- PBHL-B 452 Fundamentals of Data Management (3 credits)
- PBHL-A 316 Environmental Health Science (3 credits)
- PHBL-H 220 Policy and Management for Population Health (3 credits)
- PBHL-S 315 Community Health (3 credits)
- CSCI-N 241 Fundamentals of Web Development (3 credits)
- INFO-I 303 Organizational Informatics (3 credits)
- INFO-I 402 Informatics Project Management (3 credits)
- NEWM-N 220 Introduction to Media Application Development (3 credits)

- NEWM-N 230 Introduction to Game Design and Development (3 credits)
- COMM-C 180 Introduction to Inter-personal Communication (3 credits)
- COMM-C 223 Business and Professional Communication (3 credits)
- COMM-C 392 Health Communication (3 credits)

#### Degree electives

A minimum of 105 credit hours of required courses are listed for this curriculum. Typically, 39 credit hours are general education and preparatory courses and 12 credit hours public health courses. For those pursuing an informatics minor, 53 credit hours are required in the major and minor areas. For those pursuing a computer science minor, 54 credit hours are required in the major and minor areas. In addition, students must take a sufficient number of college-level elective courses to total a minimum of 120 credit hours. Contact the Office of Student Services at (317) 278-0753 for specific determinations.

#### Admissions criteria

*Current IUPUI students*

#### Direct admissions

In order to be admitted to this degree program a student must:

- Direct admission with test scores
  - 2.8 cumulative GPA and 1000 on the SAT or 19 on the ACT
- Direct admission without test scores
  - 3.0 cumulative

#### Intercampus transfer

In order to be admitted to this degree program a student must:

- Have earned a 2.5 undergraduate cumulative and previous semester GPA.
- Must maintain at least a 2.5 semester and cumulative grade point average (GPA) to remain in good academic standing and graduate from this program.

Updated: April 2023

### UGRD Certificate - CH Undergraduate Certificate in Community Health

The Undergraduate Certificate in Community Health provides students with the knowledge, skills and hands-on experience that prepares them to tackle real-world health problems. The coursework for this certificate prepares students to take the Certified Health Education Specialist (CHES) exam.

#### Eligibility

1. To earn the certificate, students must complete a minimum of 27 credits in accordance with the specified curriculum, and maintain a minimum cumulative grade point average of 2.5.
2. Students who successfully complete the requirements for the certificate will have this



credential added to their official transcript. A printed certificate resembling a diploma will be awarded upon graduation.

- Public Health students majoring in Community Health are not eligible for the Community Health Certificate.
- Students must declare their intention to graduate with the certificate by completing the Application for Certificate form.

### Curriculum

The coursework below will prepare students to take the Certified Health Education Specialist (CHES) exam. The certificate in Community Health curriculum consists of nine 3-credit hour courses:

- PBHL S120 Introduction to Community Health
- PBHL-S305 Careers in Public Health
- PBHL-S315 Community Health
- PBHL-S330 Theoretical Foundations of Community Health
- PBHL-S349 Research Methods in Community Health
- PBHL-S360 Assessment and Planning for Community Health Promotion
- PBHL-S361 Implementation and Evaluation for Community Health Promotion

PLUS - Pick any two of the following courses:

- PBHL S240 – Peer Health Education and Leadership
- PBHL S340 – Cultural Considerations in the Promotion of Health
- PBHL S416 – Health Promotion Application
- PBHL S422 – Coaching for Health Behavior Change
- PBHL S460 – Biosocial Approach to Global Health
- PBHL S469 – Practicum in Community Health

Updated March 10, 2021

### UGRD Certificate - HA Undergraduate Certificate in Health Administration

Designed for students interested in learning about the administrative and management functions required to run public health and healthcare organizations. Completing the Certificate in Health Administration will help prepare you for entry-level work in such organizations. Current health care professionals will find this Certificate to be a time-saving way to develop the additional skills needed for career advancement.

#### Eligibility

- To earn the Certificate, students must complete a minimum of 18 credits in accordance with the specified curriculum, and maintain a minimum cumulative grade point average of 2.5.
- Students who successfully complete the requirements for the Certificate will have this credential added to their official transcript. A printed certificate resembling a diploma will be awarded upon graduation.
- Health Services Management students are not eligible for the Health Administration Certificate.

- Students must declare their intention to graduate with the Certificate by completing the Application for Certificate form.

### Curriculum - Health Administration Certificate

#### Required Courses

- PBHL H120\* Health Care Delivery in the US (3 credits)
- PBHL H320\* Health Services Administration (3 credits)
- PBHL H375\* Management of Health Services Organizations (3 credits)

#### Choose three courses for a total of 9 credit hours

- PBHL H411 Chronic and Long-Term Care Administration (P: PBHL H120)
- PBHL H345\* Operations Management and Quality Improvement in Health Organization (P: PBHL H320)
- PBHL H420 Health Policy
- PBHL H432\* Health Care Marketing
- PBHL H441 Legal Aspects of Health Care Administration
- PBHL H330 Global Public Health
- PBHL H310 Lean in Healthcare (P: PBHL H120)
- PBHL H325 Health Information Technology, Management and Policy
- PBHL H346 Organizational Behavior and HR Management in Healthcare
- PBHL H305 Medical Group Management (PBHL H120)
- PBHL H315 High Risk Health Behaviors and Harm Reduction
- PBHL H352 Health Finance and Budgeting (P: PBHL H200)
- PBHL H353 Advanced Health Finance and Budgeting
- PBHL H200 Healthcare Accounting
- PBHL H101\* Influencing the Public's Health
- PBHL H361 Leadership in Health Management: Resolving Disputes and Difficult Conversations
- PBHL-H303 Topics in Public Health
- PBHL-H455 Topics in Public Health

\*These courses are offered online at least once per year.

Updated February 17, 2021

### Bachelor of Science in Public Health Bachelor of Science in Public Health

The Bachelor of Science in Public Health prepares you for a career preventing disease, promoting health, and addressing the inequities that keep our family, friends, and neighbors from living a long and healthy life.

This multidisciplinary, flexible degree provides a strong foundation in public health to address the obstacles to health facing us today.

You will have the opportunity to personalize your degree by choosing from courses in a variety of public health

discipline areas including community health, health policy, epidemiology, biostatistics, and global health.

With this degree, you will have the opportunity launch your career or pursue graduate studies at the top of your game. You will gain the public health problem solving skills you need to become a leader in Indiana and beyond.

### BS in Public Health competencies

- Recognize the social determinants of health that impact individuals and communities
- Prepare written and oral reports and presentations that effectively communicate information to diverse stakeholders, colleagues, communities, and the general public
- Select, collect, interpret, analyze, and summarize data drawing accurate conclusions for public health decision making
- Collaborate with diverse populations and utilize critical thinking to address public health problems
- Describe the historical role of public health nationally and globally and identify and understand current and future public health challenges faced by the U.S. and the world

## Academic requirements

### General education courses

Take 10 courses for a total of 30 credits

#### Core Communication

Take two courses for a total of 6 credits

- COMM R110 Fundamentals of Speech Communication (3 credits)
- ENG W131 Reading, Writing and Inquiry (3 credits)

#### Analytical Reasoning

Take two courses for a total of 6 credits

- Choose one course from Analytical Reasoning Group A list (MATH-M118 recommended)
- PBHL B300 Introduction to Biostatistics (3 credits)

#### Cultural Understanding

Take one course for a total of 3 credits

- Choose one course from the [approved Cultural Understanding list](#)

#### Life and Physician Science

Take two courses for a total of 6 credits

- Choose two courses from the [approved Life and Physical Sciences list](#)

#### Social Sciences and Arts and Humanities

Take three courses for a total of 9 credits

- Choose one course from the [approved Arts and Humanities list](#)
- Choose one course from the [approved Social Sciences list](#)
- Choose one course from either the Arts and Humanities list or the Social Sciences List

## Public Health core

Take 14 courses for a total of 42 credits

- PBHL-P109 Introduction to Public Health
- PBHL-P109 Introduction to Public Health
- PBHL-S120 Introduction to Community Health
- PBHL-H101 Influencing the Public's Health
- PBHL-H120 Health Care Delivery in the US
- PBHL-A215 Storytelling with Data
- PBHL-E210 Zombie Apocalypse and other Doomsday Infections
- PBHL-A316 Environmental Health Science
- PBHL-E322 Principles of Epidemiology
- PBHL-E330 Evidence Based Public Health P/C: PBHL-E 322
- PBHL-S315 Community Organizing for Health Promotion P/C: PBHL-S 120
- PBHL-S337 Health Equity and Social Determinants of Health
- PBHL-S349 Research Methods in Community Health P: PBHL-S 120
- PBHL-S305 Careers in Public Health
- PBHL-P491 Capstone in Public Health

## Public health discipline electives

Take seven courses for a total of 21 credits

- PBHL-A325 How Not to Get Killed: Injury Prevention
- PBHL-A435 Energy, Climate Change, Resilience, and Health
- PBHL-A450, A454, A455, or A456 Study Abroad: Health Systems Across the World
- PBHL-B275 Probability Without Tears and Without Calculus
- PBHL-B285 Classical Biostatistical Regression Methods P: PBHL-B 275, PBHL-B 280 or PBHL-B 300
- PBHL-B481 Introduction to Biostatistical Computing P: PBHL-B 275, PBHL-B 280 or PBHL-B 300
- PBHL-E391 Chasing Disease: Public Health Surveillance and Response
- PBHL-E333 Buzzed and Stoned: The Epidemiology of Substance Abuse
- PBHL-E335 The Lurking Pandemic: Chronic Disease Epidemiology
- PBHL-E395 Sores and Drips: The Epidemiology of STIs
- PBHL-H315 High Risk Health Behaviors and Harm Reduction
- PBHL-H330 Global Public Health
- PBHL-H420 Health Policy
- PBHL-S415 Applied Health Promotion Methods P: PBHL-S 120
- PBHL-S422 Coaching for Health Behavior Change
- PBHL-P300 Topics in Public Health
- PBHL-P400 Topics in Public Health
- PBHL-P490 Internship in Public Health P: PBHL-P 109, admission to FSPH, 2.5 GPA

Updated: April 2023

## General Degree Requirements

### Bachelor of Science in Health Data Science

The BS in Health Data Science degree consists of a minimum of 39 credits of general education courses, 6 credits in public health courses, 27 credits in the major, 20-21 credits depending on the minor and 21-22 credits of electives to total 120 credit hours. [See the specific degree requirements.](#)

### Bachelor of Science in Health Services Management

The BSHSM degree consists of a minimum of 30 credit hours of general education requirements, 71 credit hours of coursework in the major, and 19 credit hours of electives to total 120 credit hours. [See the specific degree requirements.](#)

### Accelerated Bachelor of Science in Health Services Management plus Master in Health Administration

The BSHSM degree consists of a minimum of 30 credit hours of general education requirements, 69 credit hours of coursework in the major. Twenty-four credit hours of MHA courses are to be taken in the student's final year of their bachelor's studies and additional general electives or minor beyond IUPUI common core and major to total 120 credit hours.

Twenty-seven credit hours of Master in Health Administration concentration courses to be taken the year after a student completes their bachelor's degree to complete the master's degree. [See the specific degree requirements.](#)

### Bachelor of Science in Public Health

The BSPH degree consists of a total of 30 credit hours of general education requirements, 42 credit hours of coursework in the major and 21 credit hours of discipline electives. [See the specific degree requirements.](#)

Updated: April 2023

## 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). Accreditation is the culmination of a rigorous multi-year process involving an extensive self-study and a site visit by an accreditation team.

- The Fairbanks School of Public Health is accredited by the Council on Education for Public Health.
- The MHA program is accredited by the Commission on Accreditation Healthcare Management Education.

The IU Richard M. Fairbanks School of Public Health at IUPUI has achieved a global milestone: becoming the first U.S. school of public health to receive full accreditation from the Agency for Public Health Education Accreditation (APHEA), an independent, international accrediting body based in Europe.

"As home to the first school of public health in the United States with international APHEA accreditation, IUPUI continues to strengthen our reputation as a global leader in education and research," said Nasser H. Paydar, former chancellor of IUPUI. "This honor highlights our ongoing commitment to preparing our students to succeed as

global citizens and supporting students who join us from around the world."

Learn more about our [accreditation on our website.](#)

Updated: April 2023

## Undergraduate Programs

### General Information

The Fairbanks School of Public Health offers undergraduate degrees, certificates, and minors.

### Bachelor of Science Degrees

- Bachelor of Science in Health Data Science
- Bachelor of Science in Health Services Management
- Bachelor of Science in Public Health

### Certificates

- Community Health
- Health Administration

### Minors

- Community Health
- Epidemiology
- Global Health
- Health Data Science
- Health Administration
- Public Health

For more information on undergraduate degree programs in the Fairbanks School of Public Health, please [visit our school's website.](#)

Updated: April 2023

## Minors

An undergraduate minor is an excellent way to:

- Enhance your knowledge of population health;
- Boost your chances of being accepted to medical, dental or law school;
- Make you a more competitive candidate for jobs in a variety of industries, including health care, human services, law, education, environmental services, and business.

A minor is just 15 credit hours, making it easy to fit into most undergraduate schedules.

The Fairbanks School of Public Health minors include:

### Community Health Minor

Many groups of people face significant challenges to living healthy lives. These challenges are influenced not only by individual choices but also by where we live, work and play. Through the Minor in Community Health, students gain knowledge, skills and hands-on experience that prepares them to tackle these real world problems.

### Eligibility and application procedure

- Students enrolled in baccalaureate programs at Indiana University who are in good academic standing.

- Public health students majoring in community health are not eligible for the community health minor.
- Students who successfully complete the requirements for the community health minor with a grade of “C” or better in all courses credited to the minor will have the minor conferred with their baccalaureate degree.

### Minor requirements

The Community Health Minor was revised in spring 2023. The updated minor curriculum will go into effect in fall 2023. Students who started their Community Health Minor prior to fall 2023 are encouraged to make an advising appointment with a Fairbanks School of Public Health advisor to discuss course planning to complete the minor on the old curriculum or discuss transitioning to the new minor curriculum.

Take the five courses below for a total of 15 credits.

- PBHL-S 120 Introduction to Community Health
- PBHL-S 315 Community Organizing for Health Promotion
- PBHL-S 349 Research Methods in Community Health
- PBHL-S 415 Applied Health Promotion Methods
- PBHL-S422 Coaching for Health Behavior Change

### For students who started the community health minor prior to fall 2023

#### Minor in Community Health – CHES Pathway

Students will take these five 3-credit courses:

- PBHL-S120 Introduction to Community Health
- PBHL-S315 Community Organizing for Health Promotion
- PBHL-S330 Theoretical Foundations of Community Health
- PBHL-S360 Assessment and Planning for Community Health Promotion
- PBHL-S361 Implementation and Evaluation for Community Health

You must complete the required courses with a grade of “C” or better in all courses credited to the minor.

#### Minor in Community Health – Non-CHES Pathway

Students will take these four 3-credit courses:

- PBHL-S120 Introduction to Community Health
- PBHL-S220 Navigating the Maze to Healthy Living
- PBHL-S250 Social and Behavioral Dimensions of Public Health
- PBHL-S337 Health Equity and Social Determinants of Health

*PLUS - Pick any one of the following 3-credit courses:*

- PBHL-S105 Music, Movies, and Public Health
- PBHL-S222 This Stress is Killing Me: Stress and Its Effects on You
- PBHL-S240 Peer Health Education and Leadership
- PBHL-S325 Urban Angst Suburban Blues: Public Mental Health
- PBHL-S422 Coaching for Health Behavior Change

You must complete the required courses with a grade of “C” or better in all courses credited to the minor.

### Global Health Minor

The minor in global health is designed to introduce students to selected aspects of current thinking on the connections between the environment and human health. After completing the initial general education course in global health, students take three courses focused on climate change, sustainable development, and environmental health science. Finally, students take one course from a variety of global health electives.

### Eligibility and application procedure

1. Students enrolled in baccalaureate programs at Indiana University or other accredited colleges or universities who are in good academic standing may pursue the minor in global health.
2. Public Health students majoring in global health are not eligible for this minor.
3. Students must declare their intention to receive a minor by completing an application, which is available online or at the Fairbanks School of Public Health student services. Students may also contact the undergraduate academic advisor at 317-278-0753 for the application or if they have questions. This application should be completed at the same time the student completes an application for graduation for the baccalaureate degree.
4. Students who successfully complete the requirements for the global health minor with a grade of “C” or better for all courses credited to the minor will have the minor conferred with their degree.

**NOTE:** Some courses listed below are not offered every semester – students should check with the Undergraduate Academic Advisor to determine scheduling of specific courses. Students should discuss their elective course selection with a global health faculty member. Course substitutions and course waivers must be approved by the faculty advisor.

### Minor requirements (five courses, 15 credit hours)

Take the four courses below for a total of 12 credits.

- PBHL-P 109 Introduction to Public Health
- PBHL-A 316 Environmental Health Science
- PBHL-A 325 How Not to Get Killed – Injury Prevention
- PBHL-A 435 Energy, Climate Change, Resilience, and Health

And choose one of the courses below for a total of three credits.

- PBHL-A 215 Storytelling with Data
- PBHL-A 453 Comparing Health Systems: Geneva Study Abroad
- PBHL-A 454 Comparing Health Systems: London Study Abroad
- PBHL-A 455 Comparing Health Systems: Israel Study Abroad
- PBHL-A 453 Comparing Health Systems: Geneva Study Abroad

Note: Other public health study abroad courses may be acceptable substitutions. Please speak with a Fairbanks School of Public Health academic advisor.

### For students who started the global health minor prior to fall 2023

Students must take one of the following courses (3 credits):

- PBHL-P 109 Introduction to Public Health
- PBHL-A 115 What's in your Back Yard? Environment and Health
- PBHL-A 120 Culture, Health and Happiness
- PBHL-A 140 Preparing for Disasters
- PBHL-A 215 Storytelling with Data

Students must take the following three courses (9 credits):

- PBHL-A 316 Environmental Health Science
- PBHL-A 435 Energy, Climate Change, Resilience, and Health
- PBHL-A 445 Global Environmental Health and Sustainable Development

### Epidemiology Minor

The minor in public health epidemiology is designed to introduce students to the application of epidemiological methods to real world public health challenges and research. After completing the two required courses, students may select three courses from the list of elective courses below.

#### Eligibility and application procedure

1. Students enrolled in baccalaureate programs at Indiana University or other accredited colleges or universities who are in good academic standing may pursue the minor in epidemiology.
2. Students must declare their intention to receive a minor by completing an application. Students may contact the undergraduate academic advisor in the Fairbanks School of Public Health at (317) 278-0753 if there are any questions associated with the minor or minor application. This application should be completed when the student completes an application for graduation of the baccalaureate degree.
3. Students who successfully complete the requirements for the epidemiology minor with a grade of "C" or better in all courses credited to the minor will have the minor conferred with their baccalaureate degree.

#### Epidemiology Minor requirements

Take the three courses below for a total of nine credits.

- PBHL-P 109 Introduction to Public Health
- PBHL-E 210 Zombie Apocalypse and Other Doomsday Infections
- PBHL-E 322 Principles of Epidemiology

And choose two of the courses below for a total of six credits.

- PBHL-E 333 Buzzed and Stoned: The Epidemiology of Substance Abuse

- PBHL-E 335 The Lurking Pandemic: Chronic Disease Epidemiology
- PBHL-E 391 Chasing Disease: Public Health Surveillance and Response
- PBHL-E 395 Sores and Drips: Epidemiology of Sexually Transmitted Infections

Note: PBHL-E 323 will be accepted as a substitution for one course in the choose from list.

### Health Data Science Minor

Health data science uses cutting edge technologies to gain insights into biomedical data. The minor in health data science will introduce students to the language of data in health applications so they are able to transform, visualize, analyze, and interpret information in a modern data science pipeline, presenting fundamental concepts of biostatistics through the use of computing and simulation.

After completing three core courses in probability, inference, and statistical computing (PBHL-B 275, PBHL-B 280, and PBHL-B 325), students will choose from multiple electives to fit their interests in the areas of advanced statistical computing, machine learning, and regression techniques.

#### Health Data Science Minor requirements

##### Required courses

Take three courses for 9 credits (with minimum grade of "C" or better required):

- PBHL B275 Probability without Tears and Calculus (3 credits)
- PBHL B280 Biostatistics for Health Data Scientists: A Computational Approach (3 credits)
- PBHL B481 Introduction to Biostatistical Computing (3 credits)

##### Elective courses

Choose two elective courses for 6 credits (with minimum grade of "C" or better required):

- PBHL B285 Classical Biostatistical Regression Methods (3 credits)
- PBHL B385 Contemporary Biostatistical Regression Methods (3 credits)
- PBHL B420 Introduction to Biostatistical Learning (3 credits)
- PBHL B490 Advanced Biostatistical Computing(3 credits)

### Health Administration Minor

Are you interested in learning what it takes to run a health care delivery system? If so, this is the minor for you. You'll learn what top thought leaders say about key aspects of administration of today's health systems. This is a minor that is easy to customize to your specific interests. You'll take two required health administration course, then you'll choose three electives from a list that includes health care management, policy, marketing, legal issues, human resources, and health information technology.

## Eligibility and application procedure

- Students enrolled in baccalaureate programs at Indiana University who are in good academic standing.
- Public health students majoring in health services management are not eligible for the health administration minor.
- Students who successfully complete the requirements for the minor with a grade of "C" or better in all courses credited to the minor will have the minor conferred at time of graduation.

## Health Administration Minor requirements

### Required courses

Take two courses for 6 credits:

- PBHL H120\* Health Care Delivery in the US
- PBHL H375\* Management of Health Services Organizations

\*These courses are offered online at least once per year.

\*\*PBHL-H220 will be considered an acceptable substitution for PBHL-H120 for public health majors. PBHL-H320 may be an acceptable substitution for PBHL-H375 for students who started the minor prior to fall 2023. Please reach out to a Fairbanks School of Public Health academic advisor for confirmation

### Elective courses

Choose three elective courses for 9 credits:

- PBHL H320\* Health Systems Administration
- PBHL H411 Chronic and Long-Term Care Administration
- PBHL H420\* Health Policy
- PBHL H432\* Health Care Marketing
- PBHL H441 Legal Aspects of Health Care Administration
- PBHL H330\*\* Global Public Health
- PBHL H310 Lean in Healthcare
- PBHL H325 Health Information Technology, Management and Policy
- PBHL H346\* Organizational Behavior and HR Management in Healthcare
- PBHL H345\* Operations Management and Quality Improvement in Health Organizations
- PBHL H305\* Medical Group Management
- PBHL H315 High Risk Health Behaviors and Harm Reduction
- PBHL H101\* Influencing the Public's Health
- PBHL H303 Topics in Public Health
- PBHL H455 Topics in Public Health

\*These courses are offered online at least once per year.

\*\*This course is offered online in the summer.

## Public Health Minor

Public health is one of the most important factors influencing health today. It's about promoting prevention and protection rather than focusing on treating disease and injury. The IU Richard M. Fairbanks School of Public Health allows you to discover the social, economic,

behavioral, biological, and environmental influences that can be the difference between a successful population health strategy and one that misses the target. This is a perfect minor for anyone who is interested in a career that allows them to impact the health of populations of people.

## Eligibility and application procedures

- Students enrolled in baccalaureate programs at Indiana University who are in good academic standing.
- Public health majors are not eligible for the public health minor.
- Students who successfully complete the requirements for the public health minor with a grade of "C" or better in all courses credited to the minor will have the minor conferred with their baccalaureate degree.

## Public Health Minor requirements

Students will take one required course (3 credit hours):

- PBHL-P109: Introduction to Public Health

Students will choose four courses (12 credit hours):

- PBHL-A316: Environmental Health Sciences
- PBHL-B300: Introduction to Biostatistics
- PBHL-E322: Principles of Epidemiology
- PBHL-H120: Health Care Delivery in the US
- PBHL-S120: Introduction to Community Health

Note: PBHL-S250 will be accepted as a substitution for PBHL-S120.

You must complete all required courses with a grade of "C" or better.

## Honors option

An honors option is available. Visit the IUPUI Honors College website for details or call the IU Richard M. Fairbanks School of Public Health at (317) 274-2000 and speak to our undergraduate academic advisor.

Updated: April 2023

## Admissions

For the most current information on admission requirements for [Ph.D. programs](#) at the Fairbanks School of Public Health, please visit our website.

- PhD in Biostatistics
- PhD in Epidemiology
- PhD in Health Policy and Management
- DrPH in Global Health Leadership

For the most current information on admission requirements for [master's programs](#) at the Fairbanks School of Public Health, please visit our website.

- Master of Health Administration (MHA)
- Master of Public Health (MPH)
- Master of Science in Biostatistics (MS)
- Master of Science in Global Health and Sustainable Development (MS)

For the most current information on admission requirements for [graduate certificates](#) at the Fairbanks School of Public Health, please visit our website.

- Health Policy
- Health Systems Management
- Public Health
- Infection Control and Prevention Epidemiology

Updated: April 2023

## Degree Programs

### Doctoral Programs

- PhD in Biostatistics
- PhD in Epidemiology
- PhD in Health Policy and Management
- DrPH in Global Health Leadership

### Doctoral Minors

- Biostatistics
- Global Health
- Epidemiology
- Health Policy and Management
- Health Systems and Services Research
- Population Health Analytics
- Public Health
- Social and Behavioral Science

### Master's Programs

- Master of Health Administration (MHA)
- Master of Public Health (MPH)  
Concentration Areas:
  - Epidemiology
  - Health Policy and Management
  - Interdisciplinary Public Health Studies
  - Public Health Informatics
  - Social and Behavioral Sciences
- Master of Science in Biostatistics (MS)
- Master of Science in Global Health and Sustainable Development

### Dual & Joint Degrees and Certificates

- MHA-MPH
- MHA-JD
- MPH-JD
- MPH-MD
- Graduate Certificate in Public Health-MD
- MPH-DDS
- MPH-MSW
- Graduate Certificate in Public Health-MS in Kinesiology
- MPH-MA in Bioethics

### Graduate Certificates

- Health Policy
- Health Systems Management
- Infection Control and Prevention Epidemiology
- Public Health

For the most current information on graduate degree programs at the Fairbanks School of Public Health, please [visit our school's website](#).

Updated: April 2023

## Master of Health Administration

The Master of Health Administration (MHA) program has a long and distinguished history of preparing students for leadership positions in healthcare organizations. Recognized for its exceptional faculty, groundbreaking research, study abroad opportunities, amazing network of alumni and mentors, and networking opportunities with visiting experts, the program is located minutes from the top five health systems in Indiana.

The IU MHA program prepares students for success in management and leadership positions in many different types of healthcare organizations. IU MHA graduates hold leadership roles, positions in health systems, hospitals, physician practices, health maintenance organizations, long term care facilities, health insurance organizations, and other health-related companies.

Our graduates are also leaders in governmental agencies at the local, state, and federal levels. In addition, they work as consultants, university faculty, and entrepreneurs. Many chief executive officers and other senior leaders of health organizations in Indiana are graduates of the Fairbanks School of Public Health MHA program.

MHA students will have opportunities to apply new knowledge and develop business skills and competencies as they prepare for leadership careers in the dynamic health care environment. Advanced courses include project work with health care organizations where you will acquire practical experience through a variety of experiential learning opportunities, including paid summer internships, a robust mentoring program matching individual students with health care executives, and health-related part-time positions.

The programmatic competencies integrated into the program include an understanding of the American health care system, leadership and professionalism in the workplace, human resources management, health law/ethics, quantitative skills, financial skills, information skills, decision making, implementing change, strategic thinking, healthcare operations for many different types of health care organizations, and personal development.

These advanced health care management programs offer exciting learning, growth, and development opportunities to students and early-to mid-career professionals interested in a variety of leadership roles in hospitals, managed care, ambulatory care, and voluntary health agencies. Opportunities also exist in consulting firms, corporate health programs, insurance, government, and other regulatory agencies.

### Accreditation

The IU MHA programs are fully accredited by the Commission on Accreditation of Healthcare Management Education (CAHME) and is a member of the Association of University Programs in Health Administration (AUPHA)

## About the programs

The traditional MHA program track includes a mix of students with varying backgrounds. Approximately, one-third of the students in the program have some limited professional background working in healthcare; the remaining two-thirds come directly from undergraduate programs. In the classroom, this mix creates a dynamic environment of fresh perspectives, practical experience, and discovery. The versatile faculty teach a rigorous interdisciplinary curriculum interwoven with current research, current events, and emerging healthcare trends.

The Executive MHA program track is designed for individuals who have three to five years of experience in health care management and work full-time. For this group of working health care professionals, the Executive MHA prepares them with the skills and education to take the next step in their career.

The MHA program requires successful completion of 51 graduate semester credit hours.

As a part of the traditional MHA sequence, a summer internship between the first and second year of study is an excellent opportunity to learn from a health industry leader, who will serve as preceptor for the student's experience. The internship offers students valuable experience in the health care field and is an excellent opportunity to blend academic preparation with hands-on experience. Placements are available throughout the United States.

Also, the mentorship program links local alumni and friends of the MHA program with individual students and provides the opportunity to learn from practicing health care professionals. Mentors are available in all segments of the health care field and range from recent graduates to corporate officers and senior public officials.

Many students choose to avail themselves of an administrative fellowship opportunity after graduation. IU MHA students successfully compete for national administrative fellowships with prestigious health care organizations. Fellowships have been awarded to MHA program graduates from well-known organizations, including Good Samaritan Health System in Nebraska; Winston Fellowship and Washington Hospital Group in Washington, D.C.; Baylor Medical Center in Houston; Cleveland Clinic in Cleveland; and the American College of Healthcare Executives in Chicago. Most fellowships provide a two-year paid administrative experience.

Application, admission, and degree-granting requirements and regulations shall be applied equitably to all individuals, applicants and students regardless of age, gender, race, disability, sexual orientation, religion or national origin.

### Degree requirements (51 credit hours)

Fifty-one credit hours are required to complete the MHA degree. A combination of required health administration courses and practical experience courses that together comprise 51 credits required content. The specific distribution of courses is shown below.

Students are considered full-time when taking at least nine graduate credits per semester. Part-time students must complete at least six credit hours each semester to remain in good standing. All students must complete the

program's academic requirements within five calendar years of program initiation.

### Master of Health Administration required courses

Take all 16 courses for a total of 48 credits

- H507 Management of Individual and Group Behavior (3 credits)
- H508 Managing Healthcare Accounting Information for Decision-Making (3 credits)
- H509 Financial Management Principles of Healthcare (3 credits)
- H514 Health Economics (3 credits)
- H516 Health Services Delivery and the Law (3 credits)
- H518 Statistical Methods for Health Services (3 credits)
- H521 Management Science for Health Services Administration (3 credits)
- H523 Health Services Human Resources Management (3 credits)
- H610 Lean Principles for Healthcare (3 credits)
- H612 Marketing Health Services Delivery (3 credits)
- H623 Healthcare Applications of Strategic Management (3 credits)
- H624 Developing Strategic Capability (3 credits)
- H628 Healthcare Information Systems (3 credits)
- H645 Leadership in Healthcare Administration (3 credits)
- H646 Operations Management for Healthcare Organizations (3 credits)
- P506 Population and Public Health (3 credits)

### Health Administration practical experience

- H702 Internship in Health Services Management (3 credits)

### Master of Health Administration competencies

The MHA programs (both traditional and executive tracks) integrate various skills, abilities, tools, and competencies into each course. By the end of the program students will have developed and/or improved their level of acumen in the areas of leadership, professional and social responsibility, communications and relationship management, health and health care environment, and business and analytical skills. Listed below are the key components of each competency.

#### Leadership

**MHA 1.** Develop leadership approaches that are effective for communicating a vision, motivating stakeholders, building consensus, and leading organizational change.

**MHA 2.** Work cooperatively with others; create, contribute to, and lead teams.

#### Professional and Social Responsibility

**MHA 3.** Demonstrate professional values and ethics including sensitivity to the importance of workforce diversity and cultural competency in the delivery of healthcare.



**MHA 4.** Establish a commitment to continuous learning, self-assessment, and self-improvement.

**MHA 5.** Contribute to the profession through coaching, advising, and mentoring.

### Communications and Relationship Management

**MHA 6.** Write in a clear logical manner for effective business communications.

**MHA 7.** Demonstrate effective oral communication and presentation skills.

**MHA 8.** Demonstrate effective interpersonal skills and the ability to develop and maintain positive professional relationships.

### Health and Healthcare Environment

**MHA 9.** Understand how decisions are made within the private, nonprofit, and government sectors.

**MHA 10.** Explain important issues in healthcare including the need for reform, major changes that have occurred, and proposals being considered for the U.S. healthcare delivery system.

### Business and Analytical Skills

**MHA 11.** Use quantitative information for effective organizational decision-making.

**MHA 12.** Use financial skills for effective stewardship of resources.

**MHA 13.** Understand and appropriately use information technology to support business and clinical functions.

**MHA 14.** Apply appropriate business strategies in the development of business plans and effective project management.

### Admissions

Admitted MHA students begin the program in the fall of each year. The MHA program does not accept applications for admission in the spring or summer terms. You may apply to the Master of Health Administration program online using either HAMPCAS or SOPHAS. HAMPCAS is the Healthcare Administration, Management and Policy Centralized Application Service. SOPHAS is the centralized Schools of Public Health Application Service. Preference is not given to one system over the other. The application deadlines are:

- International application deadline: February 1
- Priority deadline: February 15
- Final deadline: May 31

Application reviews begin the first week of October. In order to be considered for first round interviews in November, applications must be completed by mid-September. Beginning in January, interviews are held monthly, until the class is filled. All students who apply to the MHA program by the priority deadline, February 15, will be automatically considered for scholarships.

### MHA program admission criteria

- Baccalaureate degree from an accredited university or college with an expected grade point average of 3.0 (official transcript).

- Official GRE scores.
- Personal statement
- Résumé or CV
- Three letters of reference
- Students must earn a grade of “C” or better in required prerequisite courses prior to enrolling. Required undergraduate prerequisite courses include:
  - An undergraduate microeconomics course (e.g., ECON-E 201: Microeconomics or pre-approved equivalent) must be completed before you will be permitted to enroll in PBHL-H 514: Health Economics.
  - An undergraduate accounting course (e.g., PBHL-H 200: Health Care Accounting or pre-approved equivalent) must be completed before you will be permitted to enroll in PBHL-H 508: Managing Healthcare Accounting Information for Decision Making.
  - An undergraduate statistics course (e.g., PBHL-B 300: Introduction to Biostatistics or pre-approved equivalent) must be completed before you will be permitted to enroll in PBHL-H 518: Statistical Methods for Health Service.
- Competent written and oral communication skills

Students meeting these requirements are not guaranteed admission.

Eligible applicants may be invited to an on-campus interview day. Due to limited interview spots, it is important that you submit your application early, in order to secure an interview spot.

*Please note that all applications must be verified by HAMPCAS or SOPHAS prior to the May 31 deadline. Applications generally take four to five weeks to be verified by HAMPCAS and SOPHAS. It would be to your benefit to have your application fully complete and submitted by April 30. Applications that are not fully completed, including verification by HAMPCAS or SOPHAS, by May 31 are not guaranteed full consideration by the MHA Admission Committee.*

### MHA program admission requirements

1. Personal Statement
2. Résumé
3. Transcripts
4. Recommendations
5. Graduate Record Examination (GRE)

### Graduate Record Examination (GRE)

Submission of GRE scores is optional for applicants with a 3.0 grade point average (GPA) on a 4.0 scale.

Applicants with less than an expected 3.0 GPA may submit official GRE scores earned within the past five years—since the GRE score may benefit them in the application review process.

- A minimum total score (verbal and quantitative scores combined) of 301 is expected
- A minimum of score 3.5 is expected on the analytical writing section of the exam.

It is preferred that applicants score at or above the 50th percentile in each section of the exam.

- When applying via HAMPCAS use GRE code: 0416.
- When applying via SOPHAS use GRE code: 0167.

The following exams can be substituted in place of the GRE: LSAT, GMAT, or MCAT.

### International applicants

All applicants with foreign academic credentials must provide a World Education Services (WES) ICAP course-by-course evaluation of those credentials. Because this process can take some time, applicants should submit their transcripts to WES at least one month in advance of the application deadline (January 1). Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure, electronic transmission. This expedites the delivery of the evaluation report as well as images of the applicant's verified transcripts to SOPHAS and allows SOPHAS to process the report most efficiently.

### Executive Master of Health Administration

The Executive MHA is intended for working health care professionals who want the skills and education to take the next step in their career. This degree prepares you for greater organizational responsibilities and leadership roles.

While the course content is the same in this track, you will have the opportunity to learn alongside other working professionals while building your network and applying what you learn to your current work environment.

### Executive MHA curriculum

Fifty-one credit hours are required to complete the MHA degree. A combination of required health administration courses and practical experience courses that together comprise the 51 credits of required content. The specific distribution of courses is as follows:

### Executive Master of Health Administration required courses

***There are 16 required courses plus one internship experience required to complete the MHA degree program. A full listing of all required courses appears below.***

- H507 Management of Individual and Group Behavior (3 credits)
- H508 Managing Healthcare Accounting Information for Decision-Making (3 credits)
- H509 Financial Management Principles of Healthcare (3 credits)
- H514 Health Economics (3 credits)
- H516 Health Services Delivery and the Law (3 credits)
- H518 Statistical Methods for Health Services (3 credits)
- H521 Management Science for Health Services Administration (3 credits)
- H523 Health Services Human Resources Management (3 credits)

- H531 Population Health Management and Value-Based Health Insurance (3 credits)
- H610 Lean Principles for Healthcare (3 credits)
- H612 Marketing Health Services Delivery (3 credits)
- H623 Healthcare Applications of Strategic Management (3 credits)
- H624 Developing Strategic Capability (3 credits)
- H628 Healthcare Information Systems (3 credits)
- H646 Operations Management for Healthcare Organizations (3 credits)
- H670 Leadership in Healthcare (3 credits) \*three one-credit courses

### Health Administration practical experience

- H702 Internship (3 credits)

Candidates in the executive track may receive up to nine credit hours for their experience. Please contact the MHA program director, Dr. Antionette Smith Epps, at [antsepps@iu.edu](mailto:antsepps@iu.edu) for more information.

Each executive MHA candidate receives an individual course map which outlines their degree path and includes any content area(s) that is(are) eligible for life/practical/professional experience up to a maximum of nine (9) credit hours.

### Executive Master of Health Administration competencies

#### Leadership

**MHA 1.** Develop leadership approaches that are effective for communicating a vision, motivating stakeholders, building consensus, and leading organizational change.

**MHA 2.** Work cooperatively with others; create, contribute to, and lead teams.

#### Professional and Social Responsibility

**MHA 3.** Demonstrate professional values and ethics including sensitivity to the importance of workforce diversity and cultural competency in the delivery of healthcare.

**MHA 4.** Establish a commitment to continuous learning, self-assessment, and self-improvement.

**MHA 5.** Contribute to the profession through coaching, advising, and mentoring.

#### Communications and Relationship Management

**MHA 6.** Write in a clear logical manner for effective business communications.

**MHA 7.** Demonstrate effective oral communication and presentation skills.

**MHA 8.** Demonstrate effective interpersonal skills and the ability to develop and maintain positive professional relationships.

#### Health and Healthcare Environment

**MHA 9.** Understand how decisions are made within the private, nonprofit, and government sectors.

**MHA 10.** Explain important issues in healthcare including the need for reform, major changes that have occurred, and proposals being considered for the U.S. healthcare delivery system.

### **Business and Analytical Skills**

**MHA 11.** Use quantitative information for effective organizational decision-making.

**MHA 12.** Use financial skills for effective stewardship of resources.

**MHA 13.** Understand and appropriately use information technology to support business and clinical functions.

**MHA 14.** Apply appropriate business strategies in the development of business plans and effective project management.

### **Executive MHA admission criteria**

Application reviews begin the first week of October. In order to be considered for first-round interviews in November, applications must be completed by mid-September. Beginning in January, interviews are held monthly, until the class is filled. In order to be considered for scholarships, applicants should submit their application by February 15.

- International application deadline: February 1
- Priority deadline: February 15
- Final deadline: May 31
- At least three to five years of health care related work experience (in a clinical or non-clinical position)
- Must be currently working full-time in health care
- Résumé
- Three letters of recommendation – one from immediate supervisor or senior leader
- 3.0 or better GPA in undergraduate or other master's level program
- Most recent transcript
- No GRE is required for admission consideration to the Executive MHA program

### **International applicants**

All applicants with foreign academic credentials must provide a World Education Services (WES) ICAP course-by-course evaluation of those credentials. Because this process can take some time, applicants should submit their transcripts to WES at least one month in advance of the application deadline (January 1).

Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure electronic transmission. This expedites the delivery of the evaluation report as well as images of the applicant's verified transcripts to SOPHAS and allows SOPHAS to process the report most efficiently. [See more information.](#)

DO NOT mail any other documents to SOPHAS, including thesis, dissertations, or pre-secondary or secondary transcripts.

International applicants will be required to submit official transcripts, marksheets and diplomas from all colleges and universities attended to the IUPUI Office of International Affairs (OIA). OIA will evaluate your

transcripts to determine if eligibility requirements for graduate study have been met.

Please mail transcripts, marksheets and diploma to:

Office of International Affairs  
IUPUI  
902 W. New York Street, ES2126  
Indianapolis, IN 46202

Updated: April 2023

## **Master of Health Administration– Doctor of Jurisprudence (M.H.A.-J.D.)**

This course of study addresses the health services' need for professionals who understand the legal and administrative frameworks necessary to function successfully as health lawyers or health services administrators.

Individuals must independently apply and be accepted into both the School of Public Health MHA program and the McKinney School of Law JD program. Once students have been accepted into this joint degree program, they should meet with their academic advisors to plan the course sequencing. The program includes 45 credit hours in PBHL courses, and 82 credit hours in law courses.

### **Application and admission**

Applicants must apply for admission to each school and must meet the admission criteria published in each school's bulletin. Normally, applicants should apply to both the School of Law-Indianapolis and the School of Public Health-Indianapolis at the same time. However, a person enrolled in the School of Law may apply for admission to the graduate program in health administration up to the end of the second year of law study (approximately 57 credit hours).

A student formally enrolled in the study of health administration may seek admission to the School of Law-Indianapolis up to the end of the first year of full-time study leading to the award of the Master of Health Administration (approximately 30 hours of graduate credit).

### **Academic standing**

Grade point averages in the School of Law-Indianapolis and the School of Public Health-Indianapolis are computed separately. To continue in the joint program, the student must meet the academic standards in each school. A student failing in one school but meeting academic standards in the other may complete course work for the degree in the school in which the student is able to meet the academic standards.

Such completion must be according to the same conditions (credit hours, internship, etc.) required of regular (noncombination) degree candidates. Students are eligible for honors in the School of Law based on the criteria of their school.

### **Residency**

The student customarily completes the first 34 credit hours in the School of Law-Indianapolis. Thereafter, the student divides the remaining course work between the two schools, taking health administration courses and law

courses concurrently. Thus, the student has a continuing educational experience in both schools.

### Program requirements (127 credit hours)

#### MHA course requirements

- H507 Management of Individual and Group Behavior (3 credits)
- H508 Managing Health Care Accounting Information for Decision-Making (3 credits)
- H509 Financial Management Principles in Healthcare (3 credits)
- H514 Health Economics (3 credits)
- H518 Statistical Methods for Health Services (3 credits)
- H521 Management Science for Health Services Administration (3 credits)
- H523 Health Services Human Resources Management (3 credits)
- H610 Lean Principles for Healthcare (3 credits)
- H612 Marketing Health Services Delivery (3 credits)
- H623 Healthcare Applications of Strategic Management (3 credits)
- H624 Developing Strategic Capability in Healthcare (3 credits)
- H628 Healthcare Information Systems (3 credits)
- P506 Population and Public Health (3 credits)
- H670 Operations Management for Healthcare Organizations (3 credits)
- H735 Research in Health Administration (3 credits)

PBHL-H735 Research in Health Administration is to be completed in the last year of the combined program and jointly supervised by advisors from both schools.

#### J.D. requirements (82 credit hours)

Students are required to complete 82 credit hours of law courses and to satisfy all requirements for the Doctor of Jurisprudence degree.

#### Admissions

MHA students are admitted for matriculation in the fall of each year. The MHA program does not accept applications for admission in the spring term. You may apply to the Master of Health Administration Program online using either HAMPCAS or SOPHAS. HAMPCAS is the Healthcare Administration, Management and Policy Centralized Application Service. SOPHAS is the centralized Schools of Public Health Application Service. Preference is not given to one system over the other. The application deadlines are:

- International application deadline: February 1
- Priority deadline: February 15
- Final deadline: May 31

Application reviews begin the first week of October. In order to be considered for first-round interviews in November, applications must be completed by mid-September. Beginning in January, interviews are held monthly, until the class is filled. All students who apply to the MHA program by the priority deadline, February 15, will be automatically considered for scholarships.

#### Admission criteria

- Baccalaureate degree from an accredited university or college with an expected grade point average of 3.0 (official transcript).
- Official GRE scores.
- Personal statement
- Résumé or CV
- Three letters of reference
- Students must earn a grade of "C" or better in required prerequisite courses prior to enrolling. Required undergraduate prerequisite courses include:
  - An undergraduate microeconomics course (e.g., ECON-E 201: Microeconomics or pre-approved equivalent) must be completed before you will be permitted to enroll in PBHL-H 514: Health Economics.
  - An undergraduate accounting course (e.g., PBHL-H 200: Health Care Accounting or pre-approved equivalent) must be completed before you will be permitted to enroll in PBHL-H 508: Managing Healthcare Accounting Information for Decision Making.
  - An undergraduate statistics course (e.g., PBHL-B 300: Introduction to Biostatistics or pre-approved equivalent) must be completed before you will be permitted to enroll in PBHL-H 518: Statistical Methods for Health Service.
- Competent written and oral communication skills.

Students meeting these requirements are not guaranteed admission.

Eligible applicants may be invited to an on-campus interview day. Due to limited interview spots, it is important that you submit your application early, in order to secure an interview spot.

*Please note that all applications must be verified by HAMPCAS or SOPHAS prior to the May 31 deadline. Applications generally take four to five weeks to be verified by HAMPCAS and SOPHAS. It would be to your benefit to have your application fully complete and submitted by April 30. Applications that are not fully completed, including verification by HAMPCAS or SOPHAS, by May 31 are not guaranteed full consideration by the MHA admission committee.*

#### Admission requirements

1. Personal Statement
2. Résumé
3. Transcripts
4. Recommendations
5. Graduate Record Examination (GRE)

#### Graduate Record Examination (GRE)

All applicants are required to submit official GRE scores earned within the past five years.

- A minimum total score (verbal and quantitative scores combined) of 301 is expected
- A minimum of score 3.5 is expected on the analytical writing section of the exam.

It is preferred that applicants score at or above the 50th percentile in each section of the exam.

- When applying via HAMPCAS use GRE code: 0416.
- When applying via SOPHAS use GRE code: 0167.

The following exams can be substituted in place of the GRE: LSAT, GMAT, or MCAT.

### International applicants

All applicants with foreign academic credentials must provide a World Education Services (WES) ICAP course-by-course evaluation of those credentials. Because this process can take some time, applicants should submit their transcripts to WES at least one month in advance of the application deadline (January 1).

Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure, electronic transmission. This expedites the delivery of the evaluation report as well as images of the applicant's verified transcripts to SOPHAS and allows SOPHAS to process the report most efficiently.

Updated: April 2023

## Master of Public Health-Epidemiology

The Indiana University MPH program is a unique program that can be completed on a part-time basis in three years, or on a full-time basis in two years. Most of the required MPH courses are offered in the evening to allow working professionals the opportunity to continue their education.

Through case studies, group and individual projects, and internships, students will explore public health problems and issues, learn how to think critically, and work in teams. Courses are taught by scholars and practitioners drawn from many disciplines and perspectives.

The MPH program at IU School of Public Health is fully accredited by the Council on Education for Public Health.

The epidemiology concentration provides a balance of academic theory and real-world experience, ensuring students are prepared for a career in public health. The principles and methods of epidemiology constitute a foundation essential for policy development related to surveillance activities and prevention strategies.

Students will learn how to design and conduct studies, analyze data, and present findings in a variety of formats and for diverse audiences, as well as how to integrate the social, biological, environmental, and analytic approaches to understanding determinants of health in populations.

### Epidemiology concentration competencies

- Apply advanced descriptive and analytical epidemiology to assess health status and the burden of disease in populations.
- Interpret and apply epidemiologic research methods and findings to the practice of public health.
- Demonstrate the ability to identify and use existing key sources of epidemiologic data at the local, state, national, and international level.
- Integrate key components of disease surveillance and screening into public health programs.

- Develop presentations specifically on advanced epidemiologic analyses and interpretations for both population health professionals and lay audiences.
- Demonstrate basic data management and analysis skills using statistical software such as SAS by translating raw epidemiologic data into actionable public health information.
- Identify the principles and assess the strengths and limitations using advanced epidemiologic methods, including reliability and validity of tools to evaluate public health screening programs
- Explain the importance of epidemiology for informing scientific and ethical discussion of health issues
- Evaluate the strengths and limitations of epidemiological research and reports.

### Epidemiology curriculum

The 45-credit curriculum for the Master of Public Health in Epidemiology (in-person and online) has full-time and part-time options to meet your needs. To complete this degree, you will take a combination of public health core courses, epidemiology concentration courses, public health electives, and a practical experience course.

#### Public Health core courses

*Take all four courses for a total of 12 credits*

- PBHL P510 Introduction to Public Health (3 credits)
- PBHL P511 Comprehensive Methods and Applications in Biostatistics and Epidemiology (3 credits)
- PBHL P512 Communication & Leadership (3 credits)
- PBHL P513 Planning, Evaluation & Management (3 credits)

#### Epidemiology concentration courses

*Take all six courses for a total of 18 credits*

- B552 Fundamentals of Data Management (3 credits)
- B562 Biostatistics for Public Health II (3 credits)
- E601 Advanced Epidemiology (3 credits)
- E635 Foundations in Public Health Informatics (3 credits)
- E711 Applied Epidemiological Methods I (3 credits)
- E712 Applied Epidemiological Methods II (3 credits)
  - \*200 of the 240 hours for the required internship (E 602) must be completed prior to gaining course authorization for E712

\*Please note E711 is only offered in the fall term and E712 in the spring term.

#### Epidemiology elective courses

*Select four courses for a total of 12 credits.*

- E562 Epidemiology of Obesity and Diabetes Mellitus (3 credits)
- E606 Grant Writing in Epidemiology (3 credits)
- E609 Infectious Disease Epidemiology (3 credits)
- E610 Chronic Disease Epidemiology (3 credits)
- E618 Cancer Epidemiology (3 credits)
- E629 Introduction to Genetic Epidemiology (3 credits)

- E645 Information Exchange for Population Health (3 credits)
- E647 Introduction to Population Health Analysis (3 credits)
- E651 Public Health Surveillance (3 credits)
- E655 Historical Evolution of Epidemiology (3 credits)
- E675 Fundamentals of Injury Epidemiology (3 credits)
- E765 Nutritional Epidemiology (3 credits)
- E715 Design & Implementation of Observational Studies (3 credits)
- E795 Cardiovascular Epidemiology (3 credits)

### Public Health practical experience

Take one course for a total of 3 credits

- E602 Public Health Internship (3 credits) – 240 total hours required
  - 200 of these hours must be completed prior to gaining course authorization for the Final Concentration Project or Capstone Course

### Epidemiology curriculum (online)

#### Public Health core courses

Take all four courses for a total of 12 credits

- PBHL P510 Introduction to Public Health (3 credits)
- PBHL P511 Comprehensive Methods and Applications in Biostatistics and Epidemiology (3 credits)
- PBHL P512 Communication & Leadership (3 credits)
- PBHL P513 Planning, Evaluation & Management (3 credits)

#### Epidemiology concentration courses

Take all four courses for a total of 12 credits

- B552 Fundamentals of Data Management (3 credits)
- B562 Biostatistics for Public Health II (3 credits)
- E601 Advanced Epidemiology (3 credits)
- E635 Foundations in Public Health Informatics (3 credits)

#### Epidemiology elective courses

Select five courses for a total of 15 credits

- E562 Epidemiology of Obesity and Diabetes Mellitus (3 credits)
- E606 Grant Writing in Epidemiology (3 credits)
- E609 Infectious Disease Epidemiology (3 credits)
- E610 Chronic Disease Epidemiology (3 credits)
- E618 Cancer Epidemiology (3 credits)
- E629 Introduction to Genetic Epidemiology (3 credits)
- E645 Information Exchange for Population Health (3 credits)
- E647 Introduction to Population Health Analysis (3 credits)
- E651 Public Health Surveillance (3 credits)
- E655 Historical Evolution of Epidemiology (3 credits)
- E675 Fundamentals of Injury Epidemiology (3 credits)

- E765 Nutritional Epidemiology (3 credits)
- E715 Design & Implementation of Observational Studies (3 credits)
- E795 Cardiovascular Epidemiology (3 credits)

### Public Health practical experience

Take two courses for a total of 6 credits

- E602 Public Health Internship (3 credits) – 240 total hours required
  - 200 of these hours must be completed prior to gaining course authorization for the E704 Final Concentration Project
- E704 Epidemiology Final Concentration Project (3 credits)

### Admission criteria and requirements

#### Criteria

- Baccalaureate degree from an accredited university or college.
- Minimum of one year of undergraduate mathematics (e.g. algebra, statistics, or finite math).
- Competent written and oral communication skills.
- Students meeting these requirements are not guaranteed admission. Other admission factors include references, work experience, the personal statement, and personal interview (if applicable).

MPH applications and supplemental materials must be submitted to SOPHAS (Schools of Public Health Application Service). SOPHAS is meant to facilitate the collection of common application materials and general information. For more information and frequently asked questions please visit [sophas.org](https://sophas.org).

#### Graduate Record Examination (GRE)

GRE scores are not required for admission. To strengthen the application, GRE scores are strongly recommended if the cumulative GPA from all undergraduate institutions attended is below 3.0. Official GRE test scores taken within the past five years are acceptable.

#### Personal statement

The personal statement should contain only responses to the following five questions. Students must upload their responses to the Personal Statement section of SOPHAS.

Please answer each of the following five questions in a concise and well-written short answer format. Responses to each question should not exceed 100 words (500 words total for all five questions).

- Where did your interest in public health originate?
- Why are you interested in the Fairbanks School of Public Health?
- Which MPH concentrations are you pursuing and why?
- What do you think you might be doing professionally five years from now? Please list two possibilities.
- What do you think are the most pressing public health issues at this time?

## Résumé

For each position on the résumé or CV, provide the job title, employing agency, dates employed, and responsibilities held. Indicate any additional strengths or skills such as fluency in foreign languages, research experience, teaching experience, community service, and demonstration of leadership skills. Include professional certifications, honors, and awards.

Your résumé or CV can be uploaded electronically into SOPHAS and should not be mailed.

## Transcript

### U.S. or Canadian transcripts

Official post-secondary transcripts from all U.S. institutions attended (must be sent directly from the institutions to SOPHAS). This includes previous study at Indiana University campuses. U.S. applicants who studied at foreign institutions as part of a study abroad experience at their U.S. college or university do not need to provide a WES evaluation of their study abroad coursework.

Applicants are required to enter all U.S. coursework. Entering U.S. coursework allows SOPHAS to calculate GPAs that institutions use in reviewing applications, provides a way for institutions to review applications using electronic review forms and also allows for a mechanism to gather aggregate information about prior coursework. SOPHAS uses official transcripts to verify the self-reported coursework. This process significantly expedites the institution review process.

For regular mail, please send your transcript to:

SOPHAS  
P.O. Box 9111  
Watertown, MA 02471-9111

### For overnight delivery only:

SOPHAS  
c/o Liaison International  
311 Arsenal Street  
Watertown, MA 02472  
Phone: 617-612-2090

Applicants who have not earned a degree at the time of application submission will be required to submit an official transcript upon acceptance to the IU Fairbanks School of Public Health. This official transcript should indicate your degree earned and date of conferral. If you did not earn your degree at the time you applied to SOPHAS, please send an updated official transcript with degree earned and date of conferral to:

IU Fairbanks School of Public Health  
Office of Student Services and Admissions  
Attn: Cher Pearcy  
1050 Wishard Blvd., 5th Floor  
Indianapolis, IN 46202

### Foreign transcripts

All applicants with foreign academic credentials must provide a World Education Services (WES) ICAP course-by-course evaluation of those credentials. Because this process can take some time, applicants should submit

their transcripts to WES at least one month in advance of the application deadline.

Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure electronic transmission. This expedites the delivery of the evaluation report as well as images of the applicant's verified transcripts to SOPHAS and allows SOPHAS to process the report most efficiently.

### Letters of recommendation

Three letters of recommendation are required from academic/professional sources that can provide an unbiased critical assessment of your abilities, skills, strengths, and weaknesses. Examples of academic/professional sources are professors, academic advisors, internship preceptors, or immediate supervisors. Examples of sources that are not acceptable include coworkers, colleagues, teaching assistants, classmates, ministers, and relatives.

Recommendation letters must be submitted electronically to SOPHAS.

### Interview

Interviewees are invited at the discretion of the admission committee.

The MPH admissions committee conducts interviews using Skype video conferencing for applicants who are unable to travel to Indianapolis for the interview. Skype is a free software application that allows users to connect through the internet to communicate. Note that applicants will need access to a webcam and microphone for the interview.

## International applicants

### Test of English as a Foreign Language (TOEFL)

The Indiana University Fairbanks School of Public Health requires applicants whose native language is not English or whose academic study was done exclusively at non-English speaking institutions to prove English proficiency by providing either official Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores. Scores must be under two years old.

The preferred minimum English language test scores for admission to the Fairbanks School of Public Health are:

- Internet-based TOEFL: minimum score of 92
- Computer-based TOEFL: minimum score of 263
- Paper-based TOEFL: minimum score of 620
- IELTS (total band score): minimum score of 7

Applicants must submit:

- [TOEFL](#) scores to SOPHAS using the following designation DI Code 5688.
- [IELTS](#) scores must be uploaded electronically to SOPHAS.

### English Placement Test

- International applicants who reside in the U.S. at the time of application must submit TOEFL, ILETS or

IUPUI EAP (English for Academic Purposes) exam scores.

- International applicants who do not reside in the U.S. at the time of application must submit their TOEFL or IELTS scores with their application and, if admitted to the MPH program, also complete an EAP Exam upon arrival to Indianapolis.
- The USMLE and ECFMG do not fulfill the required proof of English proficiency when applying to the MPH program. Applicants who have passed the USMLE or ECFMG must also submit TOEFL, IELTS or EAP scores.

To schedule a test date and time please call the testing center at 317-274-2620.

### **WES evaluations of transcripts**

#### **Foreign transcripts**

All applicants with foreign academic credentials must provide a World Education Services (WES) ICAP course-by-course evaluation of those credentials. Because this process can take some time, applicants should submit their transcripts to WES at least one month in advance of the application deadline.

Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure electronic transmission. This expedites the delivery of the evaluation report as well as images of the applicant's verified transcripts to SOPHAS and allows SOPHAS to process the report most efficiently.

[See more information on WES](#)

DO NOT mail any other documents to SOPHAS, including thesis, dissertations, or pre-secondary or secondary transcripts.

International applicants will be required to submit official transcripts, marksheets and diplomas from all colleges and universities attended to the IUPUI Office of International Affairs (OIA). OIA will evaluate your transcripts to determine if eligibility requirements for graduate study have been met.

Please mail transcripts, marksheets and diploma to:

Office of International Affairs  
Indiana University-Purdue University in Indianapolis  
902 W. New York Street, ES2126  
Indianapolis, IN 46202

Office: (317) 274-7000

Fax: (317) 274-2213

Email: [intlaff@iupui.edu](mailto:intlaff@iupui.edu)

Web: [international.iupui.edu](http://international.iupui.edu)

Updated: April 2023

## **Master of Science in Biostatistics**

The Fairbanks School of Public Health offers the first MS in Biostatistics in the state. Located on Indiana's premier health and life sciences campus, you will discover exceptional faculty, nationally-recognized research, exciting study abroad options, an amazing network of alumni and mentors, and exposure to top visiting experts.

You will have hands-on learning opportunities right outside our doors through our connections with the IU

School of Medicine, the Regenstrief Institute, the Indiana State Department of Health, the NCAA headquarters, Eli Lilly, the state's top health systems, and so many more. Together, these advantages will provide you with the foundation you need to be a highly competitive candidate for today's biostatistics jobs.

The Master of Science (MS) in Biostatistics provides a solid grounding in study design and data collection, management, analysis, and appropriate interpretation and communication of study findings. Graduates will have competencies in three areas: public health, biostatistics, and data management and computation.

Through this program, students receive highly focused training in statistical theory and biostatistical methods, with an emphasis on application in a broad array of health sciences. Students are trained to be professional biostatisticians who are well qualified for employment in government and private health agencies, industry, and research institutes. The MS program also serves as excellent preparation for doctoral programs in biostatistics.

### **Curriculum**

All MS in Biostatistics candidates must satisfactorily complete a minimum of 36 credits. The curriculum includes required public health courses, biostatistics core courses, and biostatistics electives.

#### **Master of Science in Biostatistics core courses**

*Take all seven courses for a total of 24 credits*

- STAT 51900 Introduction to Probability or STAT 51600 Basic Probability Applications (3 credits)
- STAT 52800 Mathematical Statistics I or STAT 51700 Statistical Inference (3 credits)
- PBHL B571 Biostatistics Method I-Linear Model in Public Health (4 credits)
- PBHL B572 Biostatistics Method II-Categorical Data Analysis (4 credits)
- PBHL B573 Biostatistics Method III-Applied Survival Data Analysis (4 credits)
- PBHL B574 Biostatistics Method IV-Applied Longitudinal Data Analysis (3 credits)
- PBHL B581 Biostatistics Computing or PBHL B552 Fundamentals of Data Management (3 credits)

#### **Required Public Health courses**

- P510 Introduction to Public Health (3 credits)

#### **Required Epidemiology courses**

- PBHL E517 Fundamentals of Epidemiology (3 credits)

#### **Thesis option**

Register for B711 MS Thesis Research in Biostatistics. No elective courses are required when taking the thesis option.

#### **Non-thesis option**

Students taking the non-thesis option are required to take the MS competency exam. After passing the exam, students must then take three hours of electives.



Students that do not pass the MS competency exam will be required to enroll in B711 MS Thesis Research in Biostatistics.

## Biostatistics Competencies

### Biostatistics competence

Biostatistical competency relates to biostatistics methods and their application, such as descriptive statistics, inference, and statistical modeling. Along with awareness of biostatistical principles, the program will inculcate in the students a critical thinking in selecting appropriate statistical techniques (e.g., linear versus logistic regression, parametric versus semi-parametric modeling for survival data, or mixed effects versus generalized estimating equation models for longitudinal data).

The program will also build essential skills in clinical trials and observational study designs, data management and analysis, and interpretation and communication of the study results to public health practitioners. An emphasis will be given to international issues affecting public health theory and practice, as well as bioethics issues in research, especially to those arising in global or non-equitable settings.

### Public Health competence

Public Health competency refers to having 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.

### Computing and Data Management

The program will emphasize the appropriate methods for the design of data collection systems in the context of biomedical research (both pre-clinical and clinical, including clinical trials and observational studies), as well as the proper management, analysis, and interpretation of these data.

In addition to the collection, management and analysis of biomedical data, the program will provide a solid computational background to graduating students. Instruction will be primarily in SAS (The SAS Institute, Cary, NC) and R ([www.r-project.org](http://www.r-project.org)). However, other packages (e.g., STATA) and data management packages (e.g., REDCap) will be covered. Emphasis will be given to data analysis as well as quality control and data generation (simulations).

The overarching philosophy of the MS Biostatistics program is learning by doing. This approach will culminate with the data analysis project, which will be performed under the thesis advisor's mentorship along with the input from other collaborators preferably outside the department. In this manner the student will be given an early appreciation of the application of biostatistical techniques in real-life settings.

Graduate students earning the MS in Biostatistics from the IU Richard M. Fairbanks School of Public Health will demonstrate the following Principles of Graduate and Professional Learning (PGPLs):

### PGPL 1: Demonstrate knowledge and skills necessary to conduct biostatistical research.

#### Method of acquisition

- Didactic course work
- Attendance and active participation in classes, seminars, and labs
- Direct mentoring by faculty and doctoral students
- Participation in the writing of grant proposals and manuscripts

#### Assessment of learning

- Ability to successfully pass all required courses and qualifying examinations
- Ability to use statistical software required of students in the program
- Direct assessment of student progress by faculty for the master's thesis

### PGPL 2: Effectively communicate biostatistical results.

#### Method of acquisition

- Required attendance at seminars presented by faculty and peers
- Presentations in meetings and seminars
- Mentored writing of grant proposals and manuscripts

#### Assessment of learning

- Evaluation of oral and poster presentations in class, in seminars, and at conferences
- Evaluation of papers and other written class assignments
- Active participation in the writing of grants and manuscripts

### PGPL 3: Think critically and creatively to solve problems in biostatistics.

#### Method of acquisition

- Attending required seminars presented by faculty and peers
- Solving statistical problems using SAS and other software
- Writing pre-proposal for thesis
- Writing thesis proposal

#### Assessment of learning

- Grades on course assignments and class presentations
- Direct assessment by faculty on pre-proposal and thesis proposal
- Contributions to research manuscripts

### PGPL 4: Conduct biostatistical research in an ethical and responsible manner.

#### Method of acquisition

- Course content in research ethics
- Modeling of appropriate behavior in seminars by faculty and peers
- Direct mentoring by research director

- Mentoring by thesis committee

### Assessment of learning

- Grades in courses that contain research ethics content
- Faculty observation of student's ability to manipulate and interpret data
- Direct oversight by thesis committee on issues of research compliance and ethics

### Admissions

MS in Biostatistics students are admitted for matriculation in the fall of each year. The MS program does not accept applications for admission in the spring term. The application deadlines are:

- International application deadline: April 15
- U.S. application deadline: June 1

### Admission criteria

Application, admission, and degree-granting requirements and regulations of educational programs offered by the Fairbanks School of Public Health are applied equitably to all individuals, applicants, and students regardless of age, gender, race, disability, sexual orientation, religion, or national origin.

- Baccalaureate degree from an accredited university or college.
- Transcripts from all colleges and universities attended (except Indiana University)
- College Calculus I, II, Multivariate Calculus and Linear Algebra
- Competent written and oral communication skills.
- Other admission factors include strong references, work experience, and personal statement. Students meeting these requirements are not guaranteed admission.

MS in Biostatistics applications and supplemental materials must be submitted to [SOPHAS](#) (Schools of Public Health Application Service). SOPHAS is meant to facilitate the collection of common application materials and general information. For more information and frequently asked questions please visit [sophas.org](#).

In addition to the SOPHAS application all applicants will be required to complete a short application to the IUPUI Online Graduate and Professional Admissions Application system at the link provided within the SOPHAS application.

### Admission requirements

1. Personal Statement
2. Résumé
3. Transcripts
4. Recommendations

### International applicants

All applicants with foreign academic credentials must provide a World Education Services (WES) ICAP course-by-course evaluation of those credentials. Because this process can take some time, applicants should submit their transcripts to WES at least one month before the

application deadline (spring - September 15 | fall - March 1).

Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure electronic transmission. This expedites the delivery of the evaluation report as well as images of the applicant's verified transcripts to SOPHAS and allows SOPHAS to process the report most efficiently. Go to [wes.org](#) for more information.

It is strongly recommended that all transcripts are submitted no later than January 15 to allow the IU Office of International Affairs adequate time to verify transcripts.

Updated: April 2023

## Doctor of Public Health in Global Health Leadership

This exciting doctoral degree will prepare students to be knowledgeable and innovative leaders capable of effectively addressing the challenging and complex public health issues facing the world today. Based in the school's department of global health, the degree is a three-year, cohort-based distance program offered online.

Classes are delivered in real time via internet video. Students meet face-to-face three times each year in year one and year two. Most in-person sessions take place in Indianapolis, Indiana, although some may take place elsewhere in the U.S. or around the world. Students will complete their doctoral projects in year three.

Some international students admitted into the DrPH program may need visas to enter the United States for the three short residential visits in program years one and two. For those who require it, the [IUPUI Office of International Affairs](#) will assist with issuance of a form I-20 required for an F-1 visa.

The target audience is mid- to senior-level professionals who are working full time in organizations in which they have the ability to influence the health of populations anywhere in the world. We seek students from a wide range of backgrounds, including nonprofit and for-profit health care settings, NGOs, nonprofit organizations, pharma, government agencies, ministries of health, and foundations, as well as non-traditional settings.

A hallmark of the program is the diversity of backgrounds, experiences, and home bases of our students. We admit cohorts of 12 to 15 students who are as different from each other as possible, since diverse cohorts of learners inspire each other to think creatively.

Successful applicants will have strong academic records, at least a master's degree (not necessarily in public health), and a minimum of several years of experience in a wide range of healthcare settings in roles with substantial management responsibility. We seek individuals who aspire to practice-oriented careers and leadership roles in organizations in which they can have maximum influence on the public's health.

Leadership skills are cultivated through diverse experiences and exposure to a wide range of perspectives. Learning is achieved experientially, through highly interactive debates and discussions. Small class sizes and live internet video allow for rich exchanges in

real time, regardless of where in the world students are located.

The Fairbanks School of Public Health offers unique advantages, including:

- **Global curriculum.** All courses are internationalized. Competencies gained will be applicable whether individuals live and work in Indiana, the U.S., or anywhere in the world.
- **Global faculty.** In addition to U.S.-based faculty, program faculty include international practitioners and academics teaching from around the world.
- **Global network.** The program leverages relationships with other schools and programs, including opportunities to collaborate with faculty and students based around the world.

The Richard M. Fairbanks School of Public Health is accredited by the [Council on Education for Public Health \(CEPH\)](#) and the Agency for Public Health Education Accreditation (APHEA).

### Admissions

Scholars start the program in the fall. For detailed admissions criteria and instructions for applying to the doctoral program in global health leadership (DrPH), [visit the admissions page](#).

Before applying, please note that successful applicants will meet the following criteria:

- Prior master's or doctoral level degree (does not have to be in public health)
- Strong record in prior academic work (3.0 grade point average in graduate work)
- Working full-time in an organization associated with the public's health
- Mid- to senior-level leadership role with substantial management responsibility
- At least five years substantial management experience post master's degree for advanced cohort; at least three years for emerging leaders cohort
- Practice-oriented career goals
- Passion to improve the health of the public
- Ambition for top jobs for maximum influence
- Demonstrated leadership qualities

### Admission criteria

Application, admission, and degree-granting requirements and regulations shall be applied equitably to all individuals, applicants, and scholars regardless of age, gender, race, disability, sexual orientation, religion, or national origin.

All applicants are required to submit three letters of recommendation and a personal statement. The letters of recommendation must come from individuals who can speak to applicants' leadership abilities. Personal statements must include detailed responses to a list of questions provided in the application instructions.

A degree in public health is not required to be admitted. However, individuals must have a master's degree or earned doctorate to be eligible for the program.

Individuals without a master's degree in public health from an accredited school of public health will also need to complete core masters-level courses in epidemiology, health policy and management, biostatistics, social and behavioral science, and environmental health science or document their equivalencies before a DrPH degree can be conferred. We strongly recommend completion of these courses prior to beginning the DrPH program, though it is also feasible to complete the MPH core courses concurrently with the doctoral coursework.

### Application deadlines

- U.S. applicants: March 1
- International applicants: February 1

Applicants must submit three letters of recommendation, official transcripts from all undergraduate and graduate institutions attended, personal statement, and résumé or CV. The TOEFL is also required if the applicant's native language is not English and none of the applicant's previous degrees is awarded by a U.S. accredited institution or other institution where English is the official language.

DrPH Global Health Leadership applications and supplemental materials must be submitted to the IU Graduate CAS application system (select IUPUI campus).

### DrPH curriculum and competencies

All DrPH candidates must satisfactorily complete a 45-credit, online curriculum. The doctoral program in global health leadership (DrPH) competencies are aligned with the CEPH foundational competencies. Program graduates are expected to apply a global perspective to their mastery of all program competencies.

### DrPH competencies

The doctoral program in global health leadership is designed to meet the foundational competencies outlined by CEPH for DrPH programs. In addition, program graduates are expected to apply a global perspective to their mastery of all program competencies.

### DrPH foundational competencies

#### Data & Analysis

1. 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
2. Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue
3. 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

### Leadership, Management & Governance

4. Propose strategies for health improvement and elimination of health inequities by organizing stakeholders, including researchers, practitioners, community leaders and other partners
5. Communicate public health science to diverse stakeholders, including individuals at all levels of

health literacy, for purposes of influencing behavior and policies

6. Integrate knowledge, approaches, methods, values and potential contributions from multiple professions and systems in addressing public health problems
7. Create a strategic plan
8. Facilitate shared decision making through negotiation and consensus-building methods
9. Create organizational change strategies
10. Propose strategies to promote inclusion and equity within public health programs, policies and systems
11. Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency
12. Propose human, fiscal and other resources to achieve a strategic goal
13. Cultivate new resources and revenue streams to achieve a strategic goal

### Policy & Programs

14. Design a system-level intervention to address a public health issue
15. Integrate knowledge of cultural values and practices in the design of public health policies and programs
16. Integrate scientific information, legal and regulatory approaches, ethical frameworks and varied stakeholder interests in policy development and analysis
17. Propose interprofessional team approaches to improving public health

### Education & Workforce Development

18. Assess an audience's knowledge and learning needs
19. Deliver training or educational experiences that promote learning in academic, organizational or community settings
20. Use best practice modalities in pedagogical practices

### Global Health Leadership competencies

In addition to the CEPH Foundational Competencies, students also master the five additional global health leadership competencies listed below.

1. Analyze the roles and relationships of international organizations and other entities influencing global health.
2. Critique the impact of global policies on health equity and social justice across a range of cultural, economic and health contexts.
3. Apply an understanding of global economic, political, and social conditions on population health worldwide.
4. Apply diplomacy and conflict resolution strategies with global partners.
5. Exhibit communication skills that demonstrate respect for other perspectives and cultures.

### DrPH in Global Health Leadership curriculum

To complete this degree, you will take a combination of leadership courses, public health courses, and research courses that together total 45 credits.

### DrPH Leadership courses

*Take all seven courses for 15 credits*

- A755 Organizational Leadership Theory and Practice (2 credits)
- A756 Leadership in Global Health Law and Ethics (2 credits)
- A759 Leadership in Global Health Systems (2 credits)
- A762 The Science of Global Health Implementation (2 credits)
- A765 Financing Global Health (3 credits)
- A767 Executive Communication for Global Health Leaders (2 credits)
- A770 Leadership for Global Marketing, Public Relations and Fundraising (2 credits)

### DrPH Public Health courses

*Take all four courses for seven credits*

- A757 A Population Perspective for Global Health (1 credit)
- A760 Essentials of Practice-based Research (2 credits)
- A763 Leadership Challenges in Global Health Informatics (2 credits)
- A768 Global Health Policy Analysis and Advocacy (2 credits)

### DrPH Research courses

*Take all eleven courses for 23 credits*

- A758 Initiating the Research Process (1 credit)
- A761 Literature Review & Appraisal (2 credits)
- A777 Dissertation Preparation and Planning (2 credits)
- A766 Fundamentals of Research Analysis (3 credits)
- A769 Strategic Theory and Practice in Global Health Leadership (2 credits)
- A777 Dissertation Preparation and Planning (1 credit)
- A771 Program Evaluation for Global Health Leaders (2 credits)
- A778 Dissertation Preparation and Planning II (1 credit)
- A805 Doctoral Dissertation (3 credits)
- A805 Doctoral Dissertation (3 credits)
- A805 Doctoral Dissertation (3 credits)

Updated: April 2023

## Doctor of Philosophy - Biostatistics PhD in Biostatistics

The PhD in Biostatistics program at the IU Richard M. Fairbanks School of Public Health combines the rigorous theoretical training provided by IUPUI's Department of Mathematical Sciences and exceptional real-world research experience offered by our own Department of Biostatistics and Health Data Science. Students benefit from a low student/faculty ratio that promotes close interaction with faculty and targeted guidance of research.

For individuals with a solid quantitative and analytical background and a strong interest in biological, medical and/or health-related sciences, the 90-credit program offers advanced training in biostatistics that can be completed on either a full-time or part-time basis. Students will be well prepared to contribute to research, collaboration, and consulting across a broad spectrum of health and life science problems. The program emphasizes the theory and concepts underlying statistical methods, the interpretation of results from experimental, as well as observational studies, and the necessary practical skills to work in bioscience and health-related fields.

### PhD Biostatistics curriculum

To complete this degree, you will take a combination of required biostatistics courses, public health courses, biostatistics elective courses, a doctoral minor, further elective courses, independent studies, and directed dissertation research that together total 90 credits. The specific distribution of courses is as follows:

#### Public Health core courses

Every student in the program is also required to complete a fundamental epidemiology course and introductory courses in public health for a total of six credits:

- PBHL E517 Fundamentals of Epidemiology
- PBHL P510 Introduction to Public Health

#### Required coursework

Every student in the program is required to complete the following eight courses:

- STAT 51200 Applied Regression Analysis
- STAT 51900 Introduction to Probability\*
- STAT 52500 Generalized Linear Model\*
- STAT 52800 Mathematical Statistics I\*
- STAT 53600 Introduction to Survival Analysis\*
- PBHL B574 Applied Longitudinal Data Analysis\*
- PBHL B582 Introduction to Clinical Trials
- PBHL B584 Biostatistics Practicum

*\*Indicates program core courses*

Any four of the following:

- STAT 61900 Probability Theory
- STAT 62800 Advanced Statistical Inference
- PBHL B616 Advanced Statistical Computing
- PBHL B626 Advanced Likelihood Theory
- PBHL B636 Advanced Survival Analysis
- PBHL B646 Advanced Generalized Linear Models
- PBHL B656 Advanced Longitudinal Data Analysis

In addition, every student must take an additional six credit hours of statistics/biostatistics courses. At least three credit hours of these electives must be taken from 600-level courses or above.

The remaining 42 credit hours will be taken as additional coursework in a minor area (12 credits), further elective courses, independent studies, and directed dissertation research (at minimum 24 credits). This totals to 90 credit hours for the biostatistics program. The minor may be completed in any area related to the health and

life sciences disciplines, such as pharmacology and toxicology, epidemiology, genetics, biology, physiology, bioinformatics, health policy, translational science and health economics, among many others.

#### Transfer coursework

Candidates for the PhD degree may petition for up to 30 hours of graduate credit from other institutions. Students should submit the Petition for Approval of Transfer Course form to initiate the process and receive approval to apply a course completed at a different institution toward their degree. Students must provide, at minimum, the syllabus for the course under evaluation. Other documentation may be requested.

#### Expired coursework

Normally, a course may not apply toward degree requirements if it was completed more than seven years prior to the passing of the preliminary examination. Students must submit the Petition for Course Revalidation form to initiate an appeal process and receive approval to apply an expired course toward their degree. Students must provide, at minimum, the syllabus for the course under evaluation. Other documentation may be requested.

#### Elective coursework

Students must submit the Petition for Approval of Elective Course form to initiate an appeal process and receive approval to apply a course completed in a different department toward their degree. Students must provide, at minimum, the syllabus for the course under evaluation. Other documentation may be requested.

#### PhD in Biostatistics competencies

The PhD in Biostatistics focuses on four core competencies that serve as a measure of growth and criteria for assessment.

- Demonstrate the skill of applying advanced biostatistical knowledge needed to collaborate with health sciences investigators.
- Develop an appropriate statistical analysis plan in order to address the hypothesis arising from biomedical research.
- Demonstrate ability to recognize methodological problems in biomedical research.
- Derive improved methods as solutions to methodologic problems.

#### Admissions

Students start the PhD program in the fall semester. The application deadline is January 15. It is strongly recommended that all transcripts be submitted no later than December 15 to allow sufficient time for the required transcript verification process.

#### Admission criteria

Any applicant who has a bachelor's or master's degree from an accredited institution and shows promise for successfully completing all the degree requirements will be considered for admission to this program.

In addition to satisfying general Indiana University Graduate School requirements for admission, applicants

must have at least a B (3.00 GPA) average in courses taken during the last two years of their earlier degree studies, and a grade of B+ (3.50 GPA) in courses required as prerequisites for the program.

Students entering this program should have a minimal mathematics background consisting of an undergraduate course sequence in univariate and multivariate calculus (equivalent to MATH 16500, 16600 and 26100 at IUPUI) and a course in linear algebra (including matrix theory). In addition, applicants should have had a calculus-based undergraduate level course in probability or statistics. Prospective applicants who do not have this background must acquire it prior to admission to the program.

### Fall semester application deadline: January 15

All required application documents must be submitted by the PhD program deadline. It is strongly recommended that all transcripts are submitted no later than December 15 to allow adequate time to verify transcripts.

### Admission requirements

1. Personal Statement
2. Résumé
3. Transcripts
4. Recommendations
5. Proof of English Proficiency (applicants whose native language is not English)
6. Interview

### International applicants

#### World Education Services (WES) ICAP evaluation of foreign academic credentials

The Indiana University Richard M. Fairbanks School of Public Health requires all applicants with foreign academic credentials to provide a World Education Services (WES) **ICAP course-by-course** evaluation of those credentials. Applicants should submit their transcripts to WES at least one month in advance of the application deadline to ensure that the evaluation is completed in time.

Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure electronic transmission. This expedites the delivery of the evaluation report—as well as images of the applicant's verified transcripts—to SOPHAS and allows SOPHAS to process the report most efficiently. Go to [wes.org/sophas](https://wes.org/sophas) for more information.

U.S. applicants who have attended post-secondary institutions outside of the U.S. as part of a study-abroad program at a U.S. college or university do *not* need to provide a WES evaluation of their foreign coursework as long as it is noted on their U.S. transcript.

Updated: April 2023

## MHA-MPH

### Master of Health Administration - Master of Public Health

To complete this dual degree, you will take a combination of public health core courses, MHA and MPH courses, public health electives, and public health practical experience courses that together total 66 credits.

### Public Health core courses

- PBHL P510 Introduction to Public Health
- PBHL P511 Comprehensive Methods and Applications in Biostatistics and Epidemiology
- PBHL P512 Communication & Leadership
- PBHL P513 Planning, Evaluation & Management

### Concentration courses

- H507 Management of Individual Group Behaviors
- H508 Managing Healthcare Accounting for Decision Making
- H509 Financial Management Principles of Healthcare
- H514 Health Economics
- H516 Health Care Services Delivery and the Law
- H521 Management Sciences for Health Services Administration
- H523 Health Services Human Resources Management
- H611 Policy Design Implementation & Management
- H612 Health Care Marketing
- H616 Leadership in PH Organizations
- H624 Developing Strategic Capability
- H641 Ethics in Public Health
- H628 Healthcare Information Systems
- H658 Research Concepts of HPM

### Elective courses

*Enroll in one elective course from the list:*

- H501 U.S. Health Care Systems and Health Policy
- H613 Emergency Preparedness for Public Health
- H619 Financial Management in Public Health Organizations
- H621 Grant Writing and Administration for Public Health
- H644 Health Impact Assessment
- H670 Global Public Health
- H646 Operations Management for Healthcare Organizations
- S662 Integrated Learning Experience 1: Advanced Program Planning
- E601 Advanced Epidemiology
- E647 Introduction to Population Health Analysis
- P506 Population and Public Health

### Practical experience

- H602 Internship In Health Policy & Management
- H711 MPH Health Policy & Management Capstone
- H623 MHA Capstone: Healthcare Applications of Strategic Management

Updated: April 2023

## MPH-JD

### MPH-JD joint degree

The joint Master of Public Health in Health Policy and Management and Juris Doctor (MPH-JD) program between the Richard M. Fairbanks School of Public Health and Robert H. McKinney School of Law provides students with an interdisciplinary curriculum in law and health policy

and management. Students are trained to address the legalities, issues, and problems affecting personal and public health.

Individuals must independently apply and be accepted into both the McKinney School of Law JD program and the School of Public Health MPH program. Once students have been accepted into this joint degree program, they should meet with their academic advisors to plan the course sequencing. The program includes 82 credit hours in law courses and 45 credit hours in MPH courses. Nine hours of courses count for both the JD and MPH.

*\*39 MPH credit hours are required to fulfill your MPH degree. To get to a total of 45 credit hours as stated above, six credits are taken from your completed electives in the JD program. These six legal elective credits are **not** in addition to your required 82 legal credits. See below for more on electives.*

### Competencies

Graduates will be able to:

- Discuss the policy process for improving the health status of populations.
- Apply principles of strategic planning and organizational development to public health agencies.
- Demonstrate communication and leadership skills required for building community and organizational capacity.
- Apply the principles of budgeting, management, and performance evaluation in organizational and community initiatives.
- Understand the overarching policy arguments that influence the provision of health care, its financing, and the regulation of health care actors.
- Build upon an existing base of legal knowledge (e.g., contract law, torts, and administrative law) & skills (writing and analysis) to succeed in a health law career.
- Comprehend the complex relationships among health care stakeholders and the legal, ethical, and political constraints that apply to those relationships.
- Understand the complex interaction of federal and state (statutory, regulatory, and case-based) laws that defines health law.
- Appreciate that health law is a rapidly changing area of law and requires considerable effort to remain current and advise shifting sets of stakeholders.

### Master of Public Health curriculum

#### Public Health core courses

*Take all six courses for 18 credits*

- MPH P501 Social and Behavioral Science in Public Health (3 credit hours)
- MPH P504 U.S. Healthcare System and Health Policy (3 credit hours)
- MPH P510 Intro to Public Health (3 credit hours)
- MPH P517 Fundamentals of Epidemiology (3 credit hours)
- MPH P519 Environmental Science in Public Health (3 credit hours)

- MPH P551 Biostatistics for Public Health (3 credit hours)

#### Health Policy and Management concentration courses

*Take all four courses for 12 credits*

- MPH H611 Policy Design, Implementation & Management (3 credits)
- MPH H616 Leading Public Health Service Organizations (3 credits)
- MPH H619 Financial Management for Public Health Organizations (3 credits)
- MPH H628 Healthcare Information Systems (3 credits)

#### Electives

*Select three credits from MPH list*

- A641 Global Health & Sustainable Development (3 credits)
- A643 Water & Sanitation (3 credits)
- A644 Sustainable Production & Consumption (3 credits)
- A646 Restoration of the Land & Sea (3 credits)
- B552 Fundamentals of Data Management (3 credits)
- B581 Introduction to Computing (3 credits)
- B582 Introduction to Clinical Trials (3 credits)
- E606 Grant Writing (3 credits)
- E609 Infectious Disease Epidemiology (3 credits)
- E618 Global Cancer Epidemiology (3 credits)
- E645 Information Exchange for Population Health (3 credits)
- E670 Overview of Precision Health (3 credits)
- H531 Pop. Health and Value-based Care (3 credits)
- H613 Emergency Preparedness (3 credits)
- H670 Policy Analysis (3 credits)
- S620 Stress and Population Health: A biopsychosocial exploration (3 credits)
- S625 Applied Public Health Campaigns (3 credits)
- S630 Global Maternal and Child Health (3 credits)

Select six credit hours of electives approved by JD program. These six legal credit hours are **not** in addition to your required 82 legal credits.

Suggested health law elective courses for JD/MPH students [can be viewed here](#). JD course selection should be discussed with your law school program advisor.

Electives can be taken any time during course of study. Some elective courses are available during the summer. If elective is offered through another school you must obtain authorization from school or department that is offering course in order to register.

#### Practical Experience

*Take both courses for six credits*

- MPH - H602 Internship in Health Policy and Management (3 credits)
- MPH - H705 Health Policy and Management Final Concentration Project (3 credits)

Practical experience courses require authorization before registering. In order to receive registration authorization

for H602 and H705, you must receive approval from your MPH advisor, agency preceptor, and the MPH program manager as well as complete the Internship or Project Agreement form.

JD students pursuing the MPH program should contact Ross Silverman, JD, MPH, professor, Public Health Law at [rdsilver@iu.edu](mailto:rdsilver@iu.edu) for advising.

Please contact [Elijah Barry](#), FSPH graduate advisor, for any questions regarding the MPH curriculum.

### Doctor of Jurisprudence curriculum

Students pursuing the JD program should contact Julie Davis at [jd1@iu.edu](mailto:jd1@iu.edu) for advising.

### Admissions

Students may start the MPH program in either the fall or spring semester. The application deadlines are:

#### To begin in the fall

- U.S. application deadline: July 1
- International application deadline: April 1

#### To begin in the spring

- U.S. application deadline: November 1
- International application deadline: September 15

### Admission criteria

- Baccalaureate degree from an accredited university or college.
- Official GRE scores, if cumulative undergraduate GPA from all universities attended is below 3.0.
- Minimum of one year of undergraduate mathematics (e.g., algebra, statistics, or finite math).
- Competent written and oral communication skills.
- Students meeting these requirements are not guaranteed admission. Other admission factors include references, work experience, the personal statement, and personal interview (if applicable).

MPH applications and supplemental materials must be submitted to SOPHAS (Schools of Public Health Application Service). SOPHAS is meant to facilitate the collection of common application materials and general information. For more information and frequently asked questions please visit [sophas.org](http://sophas.org).

In addition to the SOPHAS application all applicants will be required to complete a short application to the IUPUI Online Graduate and Professional Admissions Application system at the link provided within the SOPHAS application.

### Admission requirements

1. Personal Statement
2. Résumé
3. Transcripts
4. Recommendations
5. Graduate Record Examination (GRE)

### Graduate Record Examination (GRE)

Applicants who have earned a cumulative undergraduate GPA of below a 3.0 are required to submit official

scores from the GRE taken within the past five years. International applicants whose undergraduate work was completed at institutions outside of the U.S. or Canada are required to submit scores from the GRE regardless of cumulative GPA.

The cumulative undergraduate GPA is calculated using all undergraduate grades earned from all colleges and universities attended. The GRE is not required of applicants who have a graduate or professional degree from a U.S. or Canadian college or university. The following exams can be substituted for the GRE: DAT, ECFMG, LSAT, OAT, GMAT, MCAT, or USMLE (steps one and two).

### International applicants

#### Test of English as a Foreign Language (TOEFL)

The Indiana University Fairbanks School of Public Health requires applicants whose native language is not English or whose academic study was done exclusively at non-English speaking institutions to prove English proficiency by providing either official Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores. Scores must be under two years old.

Updated: April 2023

## MPH-MD

### Master of Public Health - Doctor of Medicine Joint Degree

Students admitted to the Indiana University School of Medicine, at any of the nine IUSM campuses, are eligible to apply to the joint MPH-MD program at the IU Richard M. Fairbanks School of Public Health at IUPUI.

This degree will prepare you to balance your career between direct medical care of individuals and public health practice within communities. It will also expand your career options by making you more marketable for a wide variety of careers (i.e., global health, hospital leadership, health policy, health research, nonprofit management, environmental health, and refugee and immigrant health). The MPH-MD program is designed for completion in five years.

### Admissions

Medical students who are interested in pursuing the joint MPH-MD degree must apply and be admitted to the Fairbanks School of Public Health. Students must complete an application through the Online Graduate and Professional Admissions Application.

Students in the MPH-MD program will be considered for limited stipends to offset some of the expenses of the public health coursework. Students are encouraged to apply to the MPH program during their first year of medical school, however, arrangements will be made to facilitate completion of the joint degree program at any point during a student's medical education.

### Application to the Fairbanks School of Public Health process for current IUSM medical students

Medical students who are interested in pursuing the Graduate Certificate in Public Health and/or the MPH



degree should apply to the Fairbanks School of Public Health. Students may apply during any year of their medical education.

Current medical students who are interested in the Certificate in Public Health or MPH degree are required to submit an [Online Graduate and Professional Admissions Application](#). The IU application fee will be waived.

In addition to submitting the IU application, medical students should submit the following items to the Fairbanks School of Public Health Office of Student Services, attention: Shawne Mathis.

- Current résumé or CV
- One-page essay addressing the following two questions:
  - Where did your interest in public health originate?
  - How do you plan to integrate your medical and public health degrees after graduation?
- Completed and signed [Form A](#) granting permission to the IUSM Office of Medical Student Affairs to release to the Fairbanks School of Public Health (1) copies of your undergraduate and graduate transcripts, (2) MCAT scores and (3) at least three letters of recommendation from your application to medical school. For an accessible version of Form A, please contact [fsphinfo@iupui.edu](mailto:fsphinfo@iupui.edu).
- Medical students who are interested in applying for a stipend to offset some of the cost of the MPH courses should complete the scholarship application. Preference will be given to those who submit the scholarship application by February 15. For an accessible version of the scholarship application, please contact [fsphinfo@iupui.edu](mailto:fsphinfo@iupui.edu).

## Curriculum

Indiana University School of Medicine and the Fairbanks School of Public Health at IUPUI have developed an innovative coordinated MD-MPH curriculum that integrates medicine and public health training. Students learn key public health topics, including issues related to environmental health, infectious disease control, biostatistics, disease prevention and health promotion, injury control, epidemiological studies, and health policy.

To make it easy to complete two degrees in such a short time, some of the 45 MPH credits are shared with MD credits. The MD-MPH begins with five core public health courses that are typically completed online during the summer after the first year of medical school. The remaining classes are usually completed during an additional year, typically between the fourth and fifth years of medical school, however, other arrangements can be made. To incorporate experiential learning, a final public health internship and project are required.

## MPH concentration areas

### Epidemiology

This concentration will prepare students to integrate the social, biological, environmental, and analytic approaches to understanding determinants of health in populations. The principles and methods of epidemiology constitute a foundation essential for policy development related to

surveillance activities and prevention strategies. Students will learn how to design and conduct studies, analyze data, and present findings in a variety of formats and for diverse audiences.

#### Summer

- Public Health core course
- Public Health core course
- Public Health core course
- Public Health core course

#### Fall

- Public Health concentration course
- Public Health concentration course
- E602 Public Health Internship (3 credits) – 240 total hours required

#### Spring

- Public Health concentration course
- Public Health concentration course
- Elective (3 credits)
- Public Health Capstone
  - \*200 of the 240 hours for the required internship must be completed prior to gaining course authorization for this course

## Health Policy and Management

Students in this concentration will acquire skills in policy process, development, and analysis. They will explore in depth current national and state public health issues and make policy recommendations to address those issues. In addition, they will develop strategic capability for managing health services organizations in a policy context.

#### Summer

- Public Health core course
- Public Health core course
- Public Health core course
- Public Health core course

#### Fall

- Public Health concentration course
- Public Health concentration course
- H602 Public Health Internship (3 credits) – 240 total hours required

#### Spring

- Public Health concentration course
- Public Health concentration course
- Elective (3 credits)
- Public Health Capstone
  - \*200 of the 240 hours for the required internship must be completed prior to gaining course authorization for this course

## Public Health Informatics

This concentration provides a balance of academic theory and real-world experience, ensuring students are prepared for a career in public health. Public health informatics

studies and applies information science and computing techniques to public health practice.

#### Summer

- Public Health core course
- Public Health core course
- Public Health core course
- Public Health core course

#### Fall

- Public Health concentration course
- Public Health concentration course
- PBHL-E 603 Public Health Internship (3 credits) – 240 total hours required

#### Spring

- Public Health concentration course
- Public Health concentration course
- Elective (3 credits)
- Public Health Capstone
  - \*200 of the 240 hours for the required internship must be completed prior to gaining course authorization for this course

### Social and Behavioral Sciences

This concentration will prepare students to address population health problems by utilizing knowledge regarding individual, cultural, and societal determinants of healthy, behavior change theory, and applied experiences to develop, implement and evaluate health promotion interventions.

#### Summer

- Public Health core course
- Public Health core course
- Public Health core course
- Public Health core course

#### Fall

- Public Health concentration course
- Public Health concentration course
- S602 Public Health Internship (3 credits) – 240 total hours required

#### Spring

- Public Health concentration course
- Public Health concentration course
- Elective (3 credits)
- Public Health Capstone
  - \*200 of the 240 hours for the required internship must be completed prior to gaining course authorization for this course

Updated: April 2023

## MPH-DDS

### Master of Public Health - Doctor of Dental Surgery

Public health dentistry is focused on controlling dental diseases and promoting dental health through organized community efforts, locally and globally. It is a dental

practice that serves the community as a patient, rather than the individual.

Public health dentists have a broad knowledge of and skills in:

- Public health administration
- Research methodology
- Prevention and control of oral diseases
- Delivery and financing of oral health care.

Training in both dentistry and public health provides professionals with unique knowledge and skills, which provide a broad, culturally sensitive, community-based perspective on issues related to health and social well-being.

This program will prepare students with both a theoretical and a systems approach to solving complex health issues affecting populations of diverse communities.

### Curriculum

Students will earn both the MPH and DDS in four years. Students in the dual degree program will complete a total of 199 credit hours (163 credit hours in dentistry and 36 credit hours in public health).

MPH-DDS students will pursue the dental curriculum only in years one and two and begin their public health curriculum starting the summer of their third year. Courses in the public health curriculum are offered in the evening with an online degree option, which allows students to pursue both the MPH and DDS programs simultaneously without course conflicts.

MPH-DDS students will continue with the prescribed dental curriculum and incorporate a maximum of six hours of public health coursework in each of the remaining summer, fall, and spring semesters of years three and four.

The 45-credit hour public health curriculum includes six public health core courses, two practical experience courses (internship and capstone) for 24 credit hours, and nine credit hours shared from designated courses in the DDS curriculum.

### Admission requirements

- DAT scores suffice for GRE scores
- Minimum of one year of undergraduate mathematics
- Official TOEFL scores, if applicable
- Official transcripts
- Narrative statement re: your interest in the MPH Program
- Current résumé
- 3 academic or professional letters of recommendation
- Competent written and oral communication and computing skills

Updated: April 2023

## MPH-MSW

### Master of Public Health - Master of Social Work Dual Degree

Individuals must independently apply and be accepted into both the School of Public Health MPH program and the

School of Social Work MSW program. Once students have been accepted into this joint degree program, they should meet with their academic advisors to plan the course sequencing.

### Master of Public Health curriculum

#### Public health core courses

Take all four courses for a total of 12 credits

- PBHL-P 510 Introduction to Public Health (3 credits)
- PBHL-P 511 Comprehensive Methods and Applications in Biostatistics and Epidemiology (3 credits)
- PBHL-P 512 Planning, Evaluation & Management (3 credits)
- PBHL-P 513 Communication & Leadership (3 credits)

#### Concentration courses

##### Social and Behavioral Science concentration

Take all seven courses for 21 credits

- S605 Public Health Biology (1 credit)
- S615 Public Health Qualitative Methods (3 credits)
- S617 Human Promotion and Disease Prevention (3 credits)
- S619 Health Disparities Health Equity (3 credits)
- S620 Stress & Population Health: A Biopsychosocial Exploration (3 credits)
- S662 Integrated Learning Experience I: Advanced Program Planning (4 credits)
- S664 Integrated Learning Experience II: Research Methods & Program (4 credits)

Select two courses from the focus area of *Global Maternal & Child Health* or *Public Health Communications* (6 credits)

- S630 Global Maternal & Child Health (3 credits)
- S635 A Biosocial Approach to Global Health (3 credits)

or

- S625 Applied Public Health Campaigns (3 credits)
- S622 Coaching for Health & Wellness (3 credits)

##### Health Policy and Management concentration

Take all six courses for 18 credits

- H611 Policy Design Implementation and Management (3 credits)
- H616 Strategic Planning for Health Services Organizations (3 credits)
- H619 Health Economics for Public Health Professionals (3 credits)
- H628 Healthcare Information Systems (3 credits)
- H641 Public Health Ethics (3 credits)
- H658 Methods of Health Services and Policy Research (3 credits)

### Elective courses

#### Social and Behavioral Science concentration electives

Three credit hours can be counted from MSW; other courses as approved by advisor

#### Health Policy and Management concentration electives

Nine elective credit hours total, six elective credits from MSW and three elective credits from MPH

Choose one course for 3 credits

- A640 Public Health Applications of GIS (3 credits)
- E601 Advanced Epidemiology (3 credits)
- H613 Emergency Preparedness for Public Health (3 credits)
- H639 Law, Poverty, and Population Health (3 credits)
- H644 Health Impact Assessment (3 credits)
- H657 Applications of Cost Effectiveness Analysis in Public Health (3 credits)
- H621 Grant Writing and Administration for Public Health (3 credits)
- S614 Program Planning and Evaluation (3 credits)

#### Practical experience

##### Social and Behavioral Science practical experience

- S602 Fulfilled by S652 Practicum III (to be coordinated with MPH program)

##### Health Policy and Management practical experience

- H602 Fulfilled by S652 Practicum III (to be coordinated with MPH program)
- H711 HPM Capstone Experience (3 credits)

Electives can be taken any time during course of study. Some elective courses are available during the summer.

Electives must be on the approved MPH electives list or you must receive approval from advisor. If elective is offered through another school you must obtain authorization from school or department that is offering course in order to register.

Internship, Final Concentration Project and Capstone Experience courses require advisor approval and authorization to register.

### Master of Social Work curriculum

#### Foundation curriculum

The foundation curriculum is for regular standing students who enter without a BSW. Advanced standing students (students who enter with a BSW), do not need to take the foundation curriculum.

Take all six courses for 16 credits

- SWK-S 506 Intro to the Social Work Profession (1 credit)
- SWK-S 502 Research I (3 credits)
- SWK-S 508 Generalist Theory & Practice (3 credits)

- SWK-S 507 Diversity, Oppression, and Social Justice (3 credits)
- SWK-S 509 Social Work Practice II: Organizations, Communities, Societies (3 credits)
- SWK-S 505 Social Policy Analysis and Practice (3 credits)

### Concentration curriculum

Take all five courses for 15 credits

- SWK-S 518 Clinical Theory & Practice (3 credits)
- SWK-S 661 Executive Leadership Practice (3 credits)
- SWK-S 517 Assessment in Mental Health and Addictions (3 credits)
- SWK-S 519 Community/Global Theory & Practice (3 credits)
- SWK-S 555 Social Work Practicum I (3 credits)

### Advanced curriculum

- SWK-S 623 Practice Research Integrative Seminar (3 credits)
- SWK-S S651/652 Practicum II/III (8 credits)

### Health practice area curriculum

- SWK-S 692 Health Care Practice I (3 credits)
- SWK-S 693 Practice with Ind, Families & Comm Health Care Settings (3 credits)
- Elective add one course if 694 and 696 are not taken (3 credits)

Updated: April 2023

## Certificate-MS

### Graduate Certificate in Public Health - MS in Kinesiology

Preventive practices are gaining favor over the traditional treatment approach to health care in the United States. Preventive practices not only improve overall health and quality of life but are much more cost effective than the treatment required for diseases associated with a sedentary lifestyle.

Public health is the science of protecting and improving the health of communities through education, promotion of healthy lifestyles, and research for disease and injury prevention. With the growing awareness of the role that exercise plays in promoting wellness and preventing disease, the role of the exercise specialist with knowledge of public of health will rise in prominence as a career of choice.

The master's degree in kinesiology combined with a graduate certificate in public health is designed to provide students with an in-depth science-based understanding of how exercise/physical activity interventions can decrease risk of diseases related to sedentary living and prevent health problems from happening or recurring through surveillance, educational programs, sound public health policies, and research.

## Master of Kinesiology curriculum

### Master of Kinesiology required courses

Take all six courses for 18 credits

- HPER-K535 Physiological Basis of Human Performance (3 credits)
- HPER-K560 Corporate Fitness & Wellness (3 credits)
- HPER-K500 Exercise Leadership and Counseling (3 credits)
- HPER-T590 Introduction to Research in Human Performance (3 credits)
- HPER-K553 Physical Activity & Disease (3 credits)
- HPER-K562 Exercise Prescription in Health and Disease (3 credits)

### Directed Kinesiology electives

Take three credits of electives

- HPER K533 Advanced Theories of High-Level Performance (3 credits)
- HPER K552 Problems in Adapted Physical Education (3 credits)
- HPER K525 Psychological Foundations of Exercise & Sport (3 credits)
- HPER K576 Measurement and Evaluation in Physical Education (3 credits)
- HPER P561 Health & Fitness Assessment Lab (3 credits)
- HPER K563 Cardiac Assessment & Exercise Testing (3 credits)
- HPER K500 Special Topics-Cardiac Rehab Practicum (3 credits)

### Graduate Certificate in Public Health

The Graduate Certificate in Public Health is a 15-credit-hour program of study. Courses for the certificate program are offered in the fall, spring, and summer. Courses are available in-person or online. In order to receive the Graduate Certificate in Public Health, students must complete 15 credit hours of approved public health coursework with a minimum cumulative GPA of 3.0. Transfer credit or course waivers are not allowed as substitution for any courses in the certificate program.

NOTE: Students who have been awarded a Graduate Certificate in Public Health have two years to apply their credits toward the MPH or MS in Kinesiology degree. Graduates of the certificate program who do not apply to the MPH or MS in Kinesiology program within two years after completion of the certificate will not be allowed to apply the 15 credits from the certificate program toward the MPH or MS in Kinesiology programs on the IUPUI campus.

For example, a student who uses some or all of the certificate credits toward the Master's in Public Health (MPH) cannot use the same credits toward the MS in Kinesiology degree. Admission to or successful completion of the Certificate in Public Health does not guarantee subsequent admission into the MPH program or MS in Kinesiology graduate programs.

## Graduate Certificate in Public Health curriculum

Take any five of the course selections below for 15 hours

- P510 Introduction to Public Health
- P501 Social and Behavioral Science in Public Health
- P504 U.S. Healthcare Systems & Health Policy
- P517 Fundamentals of Epidemiology
- P519 Environmental Science in Public Health
- P551 Biostatistics for Public Health

### Curriculum prior to fall 2023

Take all five course for 15 hours

- PBHL P510 Introduction to Public Health (3 credits)
- PBHL P511 Comprehensive Methods and Applications in Biostatistics and Epidemiology (3 credits)
- PBHL P512 Communication & Leadership (3 credits)
- PBHL P513 Planning, Evaluation & Management (3 credits)
- One public health elective (3 credits)

## Competencies

By completing the Graduate Certificate in Public Health, you will learn how to:

- Use biostatistical methods to analyze and report public health data
- Specify approaches to assess, prevent, and control environmental and occupational hazards to human health and safety
- Use epidemiologic methods to collect, study, analyze and report the patterns of disease in human populations for diverse audiences
- Apply policy process, development, and analysis methods to address current national, state, and local public health issues
- Identify social and behavioral science factors, theories and models and develop, implement, and evaluate interventions designed to positively affect health behaviors in populations
- Exhibit high standards of personal and organizational integrity, compassion, honesty, and respect for all people
- Identify the impact of diversity and culture on public health across discipline areas
- Identify the basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of public health data

### Certificate requirements

To earn the Graduate Certificate in Public Health, students must complete coursework in the five core areas of public health and maintain a minimum cumulative grade point average of 3.0 ("B" grade on a 4.0 scale). All public health courses require authorization before registering. Please call (317) 278-0337 to obtain authorization.

Updated: April 2023

## Doctoral Minors

A doctoral minor in a public health discipline can do a lot for you, it's an excellent way to:

- Enhance your knowledge of population health

- Prepare you to successfully collaborate with colleagues in health-related disciplines
- Make you a more competitive candidate for research and teaching jobs in a variety of industries, including academia, health care, pharmaceuticals, law, environmental services, and business.

A doctoral minor is just 12 credit hours, making it easy to fit into most schedules.

### Doctoral Minor in Biostatistics

The IU Richard M. Fairbanks School of Public Health offers a PhD minor in biostatistics that teaches advanced statistical analysis that goes beyond the competencies required by most PhD programs. People who possess these special health-focused analytical and database management skills are in high demand due to the value they add to research projects.

The doctoral minor in biostatistics is comprised of a minimum of 12 credits and serves as a useful complement to many major areas of study. You will learn both the theoretical concepts that underlie the scientific method and how to apply these concepts to perform effective data collection, analysis, interpretation, and reporting of results.

This minor emphasizes the design and analysis of experimental and observational studies, the theory of probability and statistics, and statistical computing, making it particularly valuable to students in health-related doctoral programs. The minor is ideal for students from many schools, including the IU schools of Nursing, Dentistry, Medicine, Health and Rehabilitative Sciences, and Public and Environmental Affairs.

Students who wish to obtain a doctoral minor from the IU Richard M. Fairbanks School of Public Health must earn a grade of "B" or better in the coursework for the minor. Courses in which a grade of "B-" or lower is earned will not apply toward completion of the minor. Faculty in the department of biostatistics will serve as advisors for students choosing this minor.

### Biostatistics Minor curriculum

The Fairbanks School of Public Health offers a PhD minor in biostatistics with a minimum of 12 credit hours that will provide significant additional statistical analysis competencies over those required as part of the PhD requirements. The discipline of biostatistics is growing in national and international importance, is integral to many areas of pursuit, enhances analytic and databased management skills that are desirable for many doctoral level research projects, offers population-based research perspectives, offers skills that are of interest to the private and public sectors, and formally acknowledges the quantitative course work that doctoral students often take as electives through the department of biostatistics.

Students who pursue a minor in biostatistics will complement their major area of study with concepts underlying the scientific method and applications of data collection, analysis, interpretation, and reporting of results. The minor in biostatistics emphasizes the design and analysis of experimental and observational studies, theory of probability and statistics, and statistical computing.

The curriculum for the PhD minor in biostatistics provides students with a rigorous grounding in the application of

biostatistics in health-related research. This minor requires a strong quantitative aptitude and an interest in biomedical and public health applications.

### Prerequisites for Minor in Biostatistics

Minimum of two semesters of biostatistics.

- PBHL-B 551 – Biostatistics I for Public Health or PBHL B561 – Biostatistics I or Equivalent
- PBHL-B 562 – Biostatistics II for Public Health

### Required courses

#### our (4) required courses

- PBHL-B 571 Biostatistics Method I: Linear Regression Model (4 hours)
- PBHL-B 572 Biostatistics Method II: Categorical Data Analysis (4 hours)

#### One of the following two options

##### Option 1

- PBHL-B 573 – Biostatistics Methods III: Applied Survival Analysis (4 hours)

##### Option 2 (two of the following electives)

- PBHL-B 574 – Biostatistics Methods IV: Applied Longitudinal Data Analysis (3 hours)
- PBHL-B 582 – Introduction to Clinical Trials (3 hours)
- PBHL-B 583 – Applied Multivariate Analysis for Public Health (3 hours)
- PBHL-B 585 – Analysis of Observational Studies (3 hours)
- PBHL-B 586 – Technical Reporting and Scientific Writing (1 hour)

Other courses may be taken if approved by the student's minor advisor. Students who have already completed any of the required courses as part of their MPH or PhD requirements cannot apply these courses toward their minor in biostatistics. In this case, students must work with their faculty advisor to identify alternate courses in biostatistics.

The student's minor advisor will monitor satisfactory completion of the requirements for the minor in biostatistics. Doctoral students must notify the Fairbanks School of Public Health before beginning their course of study for the minor.

### Doctoral Minor in Global Health

The IU Richard M. Fairbanks School of Public Health offers a PhD minor in global environmental health that provides students with a foundation in the identification and control of global factors that can adversely affect human health and environmental quality. This minor provides the skills to prevent or attenuate the impact that an increasingly interconnected world exposed to a rapidly changing climate exerts on the health of the environment and population. People who possess these specialized skills are in high demand due to the ever-growing focus on how climate change and globalization impact the environment and population health.

The doctoral minor in global environmental health is comprised of a minimum of 12 credits and serves as

a useful complement to many major areas of study. You will learn both theoretical concepts of global and environmental public health and how to apply these concepts in assessing environmental health risks at the global and local level, collecting, and analyzing data, and developing policy. Because you can choose one of the courses from a list of options, you can customize this minor to your unique interests and needs. This minor is ideal for students from many schools, including the IU schools of Nursing, Medicine, Science, Business, and Public and Environmental Affairs.

Students who wish to obtain a doctoral minor from the IU Richard M. Fairbanks School of Public Health must earn a grade of "B" or better in the coursework for the minor. Courses in which a grade of "B-" or lower is earned will not apply toward completion of the minor. Faculty in the department of environmental health science will serve as advisors for students choosing this minor.

### Global Health Minor curriculum

#### Required courses

- P510 Introduction to Public Health (3 credits)
- A641 Introduction to Global Health and Sustainable Development (3 credits)
- A643 Water and Sanitation (3 credits)

#### Plus, one course from the following list:

- A644 Sustainable Production and Consumption (Agriculture, food, and nutrition) (3 credits)
- A645 Resilient Cities & Communities (3 credits)
- A646 Preservation and Restoration of Land and Sea (3 credits)
- A670 Study Abroad (3 credits)

Other courses may be taken if approved by the student's minor advisor. Students who have already completed any of the required courses as part of their MPH or PhD requirements may not apply those courses toward their minor in global environmental health and must instead work with their faculty advisor to identify alternate GEH courses.

The student's minor advisor will monitor satisfactory completion of the requirements for the doctoral minor in global environmental health. Doctoral students must notify the Fairbanks School of Public Health before beginning their course of study for the minor.

### Doctoral Minor in Epidemiology

The IU Richard M. Fairbanks School of Public Health offers a PhD minor in epidemiology that provides students with a foundation in the concepts, principles, and practice of epidemiology. People who possess these specialized skills are in high demand because their enhanced analytical and data management skills are desirable for many doctoral-level research projects.

The doctoral minor in epidemiology is a rigorous, highly focused 12-credit hour minor that serves as a useful complement to many major areas of study. You will learn both theoretical concepts of epidemiology and how to apply these concepts. By completing this minor, you will be able to:

- Use epidemiology methods to collect data and to study, analyze, and report the patterns of disease in human populations for diverse audiences
- Use biostatistics to analyze and report public health data
- Understand and apply descriptive epidemiology to assess health status and the burden of disease in populations
- Understand, apply, and interpret epidemiologic research methods and findings to the practice of public health
- Demonstrate the ability to identify and use existing sources of epidemiologic data at the local, state, national, and international level
- Understand the key components of public health surveillance and public health screening programs
- Develop written and oral presentations based on epidemiologic analysis for both public health professionals and lay audiences
- Demonstrate a basic level of SAS programming for data set creation, data management, and data analysis

Because you can choose two of the courses from a list of options, you can easily customize this minor to your unique interests and needs. This minor is ideal for students from many schools, including the IU schools of Nursing, Dentistry, Medicine, Physical Education and Recreation, Health Rehabilitative Sciences, Law, and Public and Environmental Affairs.

Students who wish to obtain a doctoral minor from the IU Richard M. Fairbanks School of Public Health must earn a grade of “B” or better in the coursework for the minor. Courses in which a grade of “B-” or lower is earned will not apply toward completion of the minor. Faculty in the department of epidemiology will serve as advisors for students choosing this minor.

### Epidemiology Minor curriculum

#### Required courses

- E517 Fundamentals of Epidemiology (3 credits)
- E601 Advanced Epidemiology (3 credits)

#### Plus choose two courses from the following list:

- E609 Infectious Disease Epidemiology (3 credits)
- E563 Systematic Review and Meta-analysis (3 credits)
- E618 Global Cancer Epidemiology (3 credits)
- E635 Foundations of Public Health Informatics (3 credits)
- E670 Overview of Precision Health (3 credits)
- E675 Fundamentals of Injury Epidemiology (3 credits)
- E715 Design & Implementation of Observational Studies (3 credits)
- E765 Nutritional Epidemiology (3 credits)

Other courses may be taken if approved by the student’s minor advisor. Students who have already completed any of the required courses as part of their MPH or PhD requirements may not apply those courses toward their

minor in epidemiology and must instead work with their faculty advisor to identify alternate epidemiology courses.

The student’s minor advisor will monitor satisfactory completion of the requirements for the doctoral minor in epidemiology. Doctoral students must notify the Fairbanks School of Public Health before beginning their course of study for the minor.

### Doctoral Minor in Health Policy and Management

The IU Richard M. Fairbanks School of Public Health offers a PhD minor in health policy and management that provides students with a foundation in the concepts and methods of health policy and management research. These concepts and methods draw on many disciplines, including economics, organizational theory and behavior, informatics, sociology, psychology, and statistics.

Therefore, this minor is ideal for students from many schools including the IU Schools of Nursing, Dentistry, Medicine, Liberal Arts, Physical Education and Recreation, Health Rehabilitative Sciences, Law, and Public and Environmental Affairs. Students in other School of Public Health doctoral programs are also welcome in the minor.

The doctoral minor in health policy and management is a rigorous, highly focused 12-credit hour minor that serves as a useful complement to many major areas of study. You will learn theoretical concepts and how to apply them. [Accomplished and research-productive faculty](#) in the department of health policy and management will serve as advisors and instructors for students choosing this minor. By completing this minor, you will be able to:

- Critically appraise research streams in healthcare management, health policy, and health services research and identify important new research questions
- Understand foundational theories and concepts used in healthcare management, health policy, and health services research and apply them to novel research studies
- Identify and understand the strengths and weaknesses of study designs frequently used in healthcare management, health policy, and health services research
- Conduct quantitative and qualitative analyses to answer critical healthcare management, health policy, and health services research questions

Students who wish to obtain a doctoral minor from the IU Richard M. Fairbanks School of Public Health must earn a grade of “B” or better in the coursework for the minor. Courses in which a grade of “B-” or lower is earned will not apply toward completion of the minor.

### Health Policy and Management Minor curriculum

Choose any four of the following 3-credit courses:

- PBHL-H 747 Health Policy and Management Research Seminar (may be taken up to two times on different topics)
- PBHL-H 786 Healthcare Organizations Research
- PBHL-H 781 Research Design in Health Policy and Management

- PBHL-H 782 Health Services Empirical Methods (Quantitative Methods)
- PBHL-H 783 Qualitative Methods for Health Services Research

Other courses may be taken if approved by the student's minor advisor.

### Doctoral Minor in Health Systems and Services Research

This minor provides a mix of substantive and methods courses in social science or related reference disciplines that are frequently drawn on by researchers who study health systems or health services.

The purpose of this minor is to provide PhD students with a new minor option that helps them develop conceptual and methodological depth in social science or related reference disciplines that are frequently drawn on by researchers who study health systems or health services, including economics, psychology, sociology, biostatistics, and communication studies. Because these areas of study often employ related concepts and methods, this minor will allow students to take minor courses that cut across departments and programs while still provide depth in a non-major area of study.

#### Health Systems and Services Research Minor curriculum

Students will complete 12 credits by choosing from the list of substantive and methods courses.

Students complete one or two of the following substantive courses:

##### Economics

- ECON E581 Applied Microeconomics I
- ECON E582 Applied Microeconomics II
- ECON E521 Microeconomics Theory
- ECON E583 Applied Macroeconomics

##### Psychology

- PSY 572 Organizational Psychology
- PSY 570 Staffing
- PSY-I 647 Attitudes and Social Cognition

##### Sociology

- SOC R515 Sociology of Health and Illness
- SOC R556 Advanced Sociological Theory I
- SOC R557 Advanced Sociological Theory II
- SOC R585 Social Aspects of Mental Health and Mental Illness
- SOC R560 Topics in Sociology

##### Communication Studies

- COMM C500 Advanced Communication Theory
- COMM C592 Advanced Health Communication
- COMM C528 Group Communication and Organizations

Students complete two or three of the following methods courses:

##### Econometric Methods

- ECON E570 Econometrics

- ECON E574 Times Series and Forecasting

##### Psychology Methods

- PSY 60800 Measurement Theory and the Interpretation of Data
- PSY I643 Field Methods and Experimentation
- PSY I583 Judgment and Decision Making in Organizations

##### Biostatistics and Epidemiology Methods

- PBHL E715 Design and Implementation of Observational Studies
- PBHL B585 Analysis and Interpretation of Observational Studies
- PBHL B 571 Biostatistics Method I-Linear Model in Public Health (4 credits)
- PBHL B 572 Biostatistics Method II-Categorical Data Analysis (4 credits)
- PBHL B 573 Biostatistics Method III-Applied Survival Data Analysis (4 credits)
- PBHL B 574 Biostatistics Method IV-Applied Longitudinal Data Analysis (3 credits)
- PBHL B 581 Biostatistics Computing
- B552 Fundamentals of Data Management
- PBHL B 582 Introduction to Clinical Trials

##### Other Social Science Methods

- OLS 53010 Mixed Methods Research
- E563 Systematic Review and Meta-Analysis in Health Sciences

### Doctoral Minor in Public Health

The IU Richard M. Fairbanks School of Public Health offers a PhD minor in public health that provides students with a foundation in the concepts, principles, and practice of public health. People who possess these specialized skills are in high demand because of the population health perspective they can contribute to many doctoral-level research projects.

The doctoral minor in public health is a rigorous, highly-focused 12-credit hour minor that serves as a useful complement to many major areas of study. You will learn both theoretical concepts and how to apply them. By completing this minor, you will be able to:

- Use biostatistical methods to analyze and report public health data
- Specify approaches to assess, prevent, and control environmental and occupational hazards to human health and safety
- Use epidemiologic methods to collect, study, analyze, and report the patterns of disease in human populations for diverse audiences
- Identify and analyze the components and issues of leadership, including financing and delivery of public health services and systems
- Apply policy process, development, and analysis methods to address current national, state, and local public health issues
- Identify social and behavioral sciences factors, theories, and models, and develop, implement, and evaluate interventions designed to positively affect health behaviors in populations



- Collect and disseminate public health data through the use of technology and media
- Explain how human biology influences health and public health practice
- Exhibit high standards of personal and organizational integrity, compassion, honesty, and respect for all people
- 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
- Demonstrate the impact of diversity and culture on public health across discipline areas
- Demonstrate an understanding of the basic ethical and legal principles pertaining to the collection, maintenance, use, and dissemination of public health data

This minor is ideal for students from many schools, including the IU schools of Nursing, Dentistry, Medicine, Physical Education and Recreation, Health Rehabilitative Sciences, Law, and Public and Environmental Affairs.

Students who wish to obtain a doctoral minor from the IU Richard M. Fairbanks School of Public Health must earn a grade of "B" or better in the coursework for the minor. Courses in which a grade of "B-" or lower is earned will not apply toward completion of the minor.

#### Public Health Minor curriculum

- PBHL-P 510 Introduction to Public Health (3 credits)
- PBHL-P 511 Comprehensive Methods and Applications in Biostatistics and Epidemiology (3 credits)
- PBHL-P 512 Planning, Evaluation & Management (3 credits)
- PBHL-P 513 Communication & Leadership (3 credits)
- One public health elective (3 credits)

#### Doctoral Minor in Social and Behavioral Science

The IU Richard M. Fairbanks School of Public Health offers a PhD minor in social and behavioral sciences that provides students with a foundation in the concepts, principles, and practice of the topic. People who possess these specialized skills are in high demand because of what they can contribute to many doctoral-level research projects.

The doctoral minor in social and behavioral sciences is a rigorous, highly-focused 12-credit hour minor that serves as a useful complement to many major areas of study. You will learn both theoretical concepts and how to apply them. By completing this minor, you will be able to:

- Identify the causes and conditions linked to social, cultural, and behavioral factors that affect the health of individuals and populations
- 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
- Identify social, cultural, and behavioral science factors, theories, and models used to develop,

implement, and evaluate interventions designed to positively affect health behaviors in populations

- In collaboration with others, prioritize individual, organizational, community, and societal concerns and resources for public health programs, policies, and interventions
- Apply evidence-based approaches in the development, implementation, and evaluation of social and behavioral science interventions in diverse populations
- Specify targets and levels of intervention for social and behavioral science programs and/or policies

Because you can choose four of the courses from a list of options, you can easily customize this minor to your unique interests and needs. This minor is ideal for students from many schools, including the IU schools of Nursing, Dentistry, Social Work, Philanthropy, Medicine, Health and Human Sciences, Law, and Public and Environmental Affairs.

Students who wish to obtain a doctoral minor from the IU Richard M. Fairbanks School of Public Health must earn a grade of "B" or better in the coursework for the minor. Courses in which a grade of "B-" or lower is earned will not apply toward completion of the minor. Faculty in the department of social and behavioral sciences will serve as advisors for students choosing this minor.

#### Social and Behavioral Science Minor curriculum

##### Choose four courses from the following list:

- PBHL S615 Qualitative Methods (3 credits)
- PBHL S617 Health Promotion and Disease Prevention (3 credits)
- PBHL S619 Health Disparities and Health Equity (3 credits)
- PBHL S620 A Biopsychosocial Approach to Stress (3 credits)
- PBHL S622 Coaching for Health Behavior Change (3 credits)
- PBHL S625 Applied Public Health Campaigns (3 credits)
- PBHL S630 Global Maternal and Child Health (3 credits)
- PBHL S635 A Biosocial Approach to Global Health (3 credits)
- PBHL S640 Culture and Health (3 credits)
- PBHL P510 Introduction to Public Health (3 credits)

Other courses may be taken if approved by the student's minor advisor. Students who have already completed any of the required courses as part of their MPH or PhD requirements may not apply those courses toward their minor in social and behavioral sciences and must instead work with their faculty advisor to identify alternate SBS courses.

The student's minor advisor will monitor satisfactory completion of the requirements for the doctoral minor in social and behavioral sciences. Doctoral students must notify the Fairbanks School of Public Health before beginning their course of study for the minor.

## Doctoral Minor in Population Health Analytics

The IU Richard M. Fairbanks School of Public Health offers a PhD minor in population health analytics that prepares doctoral students to analyze patterns and trends in large data sets in the context of population health (e.g., health services research, public health). Students will learn both the theories and methods needed to be successful in the conduct of research across the health data sciences. Skills and methods taught in this minor are highly sought by employers, including governmental research agencies as well as academic programs across the spectrum of higher education.

While graduate students can take a single course on data science within their department to grasp the main concepts, one course is not sufficient to develop a core competency in applying a broad range of analytic techniques to population health data sets.

By combining a diverse set of related courses from multiple schools and departments, we offer a unique minor that adds value to the individual courses emerging across campus. When complete, students will be prepared for success in the population health sciences.

This minor is open to any doctoral student at IUPUI and not just those in the Fairbanks School of Public Health. Students who wish to obtain a doctoral minor from the IU Richard M. Fairbanks School of Public Health must earn a grade of "B" or better in the coursework for the minor. Courses in which a grade of "B-" or lower is earned will not apply toward completion of the minor. Faculty in the departments of epidemiology and health policy and management will serve as minor advisors for students pursuing this doctoral minor.

### Population Health Analytics Minor curriculum

#### Required courses

- PBHL E647 Introduction to Population Health Analytics (3 credits)

#### Choose two courses from the following list:

- INFO B573 Programming for Life Sciences (3 credits)
- INFO B585 Biomedical Analytics (3 credits)
- INFO B643 Natural Language Processing for Biomedical Records and Reports (3 credits)
- INFO H515 Introduction to Data Analytics (3 credits)
- INFO H516 Applied Cloud Computing for Data Intensive Sciences (3 credits)
- INFO H517 Visualization Design, Analysis, and Evaluation (3 credits)

#### Choose one course from the following list:

- PBHL H628 Health Information Systems (3 credits)
- PBHL E645 Information Exchange for Population Health (3 credits)

Updated: April 2023

## Doctor of Philosophy - Epidemiology

The PhD in Epidemiology program at the IU Richard M. Fairbanks School of Public Health is designed for advanced graduate students who want to study the distribution of health and illness in diverse populations, the occurrence of illness, and how to assess the determinants of health and disease risk in human populations.

Our students are trained to become scientific leaders in academic, governmental agency, non-governmental agency, and industry settings. Graduates are trained to develop and conduct epidemiologic research and to translate their findings to a diverse audience, including the biomedical research community, public health practitioners, health policy makers, and clinicians in the health professions, as well as to the general public.

The 90-credit hour Epidemiology PhD program can be completed on a part-time or full-time basis. Scholarships, traineeships, and pre-doctoral fellowships are available to full-time students of outstanding merit. Our PhD program promotes educational and scientific development through research collaborations, public health partnerships, and a commitment to diversity.

PhD students will work one-on-one with individual faculty members and may pursue topics of interest, capitalizing on faculty members' research expertise and on-going projects. Key areas of research available to epidemiology doctoral students on the IUPUI campus include:

- Cancer Epidemiology and Cancer Prevention
- Cardiovascular Disease Epidemiology
- Clinical Epidemiology
- Metabolic Disease Epidemiology
- Infectious Disease Epidemiology
- Injury Epidemiology
- Genetic and Molecular Epidemiology
- Nutritional Epidemiology
- Pharmacoepidemiology
- Public Health Informatics

Extensive research opportunities are available to our doctoral students across the IUPUI academic health sciences campus. There is no other location in Indiana that offers such a diverse and rich environment for epidemiologic research.

### PhD in Epidemiology curriculum

To complete this degree, you will take a combination of required Epidemiology Core courses, Methods courses, Elective courses, a Doctoral Minor, Doctoral Research Seminars, and guided Dissertation Research that together total 90 credits.

If applicants to the Epidemiology PhD program have recently completed an MPH program in epidemiology or a related area and therefore already have solid academic preparation in epidemiology and biostatistics, they may not need to take select foundation courses, which would reduce their required curriculum credits. Individuals accepted into the program who do not have the foundation courses in epidemiology and biostatistics will be required to take the full 90-credit curriculum:

## Required Core Courses

Take all 10 courses for a total of 30 credits

- PBHL B552 Fundamentals of Data Management (using SAS) (3 credits)
- PBHL B586 Technical Reporting and Scientific Writing (1 credits)
- PBHL B571 Biostatistics Method I: Linear Model in Public Health (4 credits)
- PBHL B572 Biostatistics Method II: Categorical Data Analysis (4 credits)
- PBHL E517 Fundamentals of Epidemiology (3 credits)
- PBHL E601 Advanced Epidemiology (3 credits)
- PBHL E606 Grant Writing for Public Health (3 credits)
- PBHL E629 Introduction to Genetic Epidemiology (3 credits)
- PBHL E635 Foundations of Public Health Informatics (3 credits)
- PBHL E715 Design and Implementation of Observational Studies (3 credits)

## Methods courses

Choose three courses for a total of 9 credits

- PBHL B573 Biostatistics Method III: Applied Survival Data Analysis (4 credits)
- PBHL B574 Biostatistics Method IV: Applied Longitudinal Data Analysis (3 credits)
- PBHL B582 Introduction to Clinical Trials (3 credits)
- PBHL B583 Applied Multivariate Analysis in Public Health (3 credits)
- PBHL E645 Information Exchange for Population Health (1 credit)
- PBHL E563 Systematic Review and Meta-analysis (3 credits)
- MGEN G788 (INFO I590) Intro to the Next Generation Sequencing Technology (3 credits)
- INFO B636 Next Generation Geonomic Data Analysis (3 credits)

\*Students may take methods and substantive electives offered by other IUPUI departments with advisor approval.

## Elective courses

Choose five courses for a total of 15 credits

- PBHL E609 Infectious Disease Epidemiology (3 credits)
- PBHL E610 Chronic Disease Epidemiology (3 credits)
- PBHL A617 Environmental Epidemiology (3 credits)
- PBHL E618 Cancer Epidemiology (3 credits)
- PBHL E675 Fundamentals of Injury Epidemiology (3 credits)
- PBHL E750 Doctoral Topics in Epidemiology (variable 1-3 credits)
- PBHL E751 Doctoral Readings in Epidemiology (variable 1-3 credits)
- PBHL E752 Doctoral Level Directed Research (3 credits)
- PBHL E765 Nutritional Epidemiology (3 credits)

- PBHL E770 Occupational Epidemiology (3 credits)
- PBHL E780 Pharmaco-Epidemiology (3 credits)
- SOC R585 Social Aspects of Mental Health & Illness (3 credits)

\*Students may take methods and substantive electives offered by other IUPUI departments with advisor approval.

## Minor area

Students must complete a PhD minor in an area related to a health and life science. The minor in most cases is comprised of four graduate level courses (12 credit hours) in the chosen area and must comply with the minor requirements of the respective department/unit.

## Doctoral research seminars

Students will enroll in three doctoral research seminars. Each seminar is one credit, for a total of three credits. (PBHL E775)

## Dissertation

The remaining 21 hours will be guided research dissertation hours. (PBHL E800)

## Other degree requirements for the PhD in Epidemiology

### Public Health coursework

Epidemiology students without a graduate degree, certificate, or coursework in public health will be required to complete online introductory modules on Environmental Health, Health Policy and Management, and Social and Behavioral Science to ensure that they have basic competencies in all five core public health areas. This is a requirement of the Council on Education in Public Health (CEPH), the school's accrediting body.

### PhD advisory committee

The department of epidemiology will set up an advisory committee for the student, typically in the first year after admission to the PhD program. The advisory committee usually includes at least two epidemiologists and one or two faculty members from another discipline. The advisory committee will approve the student's program of study and counsel the student until he or she passes the qualifying examination. Each PhD student will also be assigned to an academic advisor from one of the full-time faculty members in the department of epidemiology.

### Minor area

The student will select a minor from an academic unit other than the department of epidemiology. The PhD minor must be approved by the student's advisory committee, and comply with requirements of the respective minor department or program. Examples of minors include: biostatistics, genetics, pharmacology, toxicology, health economics, environmental health, and health informatics.

### Qualifying examinations

The qualifying examination will be based upon the student's PhD coursework and will be taken after all courses have been completed. Students who fail the

qualifying examination are normally allowed to retake it only once. The qualifying exam will be a written exam.

Students who have passed the qualifying examination must enroll each semester (excluding summer sessions) for dissertation credits. Once such students have accumulated 90 credit hours in completed coursework and dissertation credits, they must enroll for six hours of graduate credit (GRAD-G901) each semester until the degree is completed. The fee for this course is \$150. Students are permitted to enroll in G901 for a maximum of six semesters.

The Department of Epidemiology will monitor the student's progress toward the PhD degree and will make recommendations to the University Graduate School Indianapolis regarding the nomination to candidacy, the appointment of a research committee, the defense of the dissertation, and the conferring of the PhD degree.

### Dissertation

The dissertation will be written on an original topic of research and presented as one of the final requirements for the PhD degree. The student's dissertation research committee will be comprised of members of the graduate faculty. The chair of the dissertation research committee must be a regular faculty member in the department of Epidemiology and a full member of the Graduate Faculty.

The student will submit to the IUPUI Graduate Office, acting for the University Graduate School Indianapolis, a two-page prospectus of the dissertation research and the membership of the research committee at least six months before the defense of the dissertation for their approval.

After the committee has reviewed the dissertation, the decision to schedule the defense will be made. The student will then present and defend the dissertation orally in a public forum before the committee. Following the dissertation defense, all deficiencies must be adequately addressed to obtain approval by the dissertation research committee.

### Competencies

The PhD in Epidemiology focuses on five core competencies that serve as a measure of growth and criteria for assessment.

1. Design investigations of acute and chronic conditions, as well as other adverse health outcomes in targeted populations characterized by age, sex, race, ethnicity, culture, societal, educational, and other demographic backgrounds.
2. Manage and analyze data from epidemiologic investigations and surveillance systems.
3. Use current knowledge of causes of disease to guide epidemiologic perspectives.
4. Prepare written reports and presentations to effectively communicate epidemiological evidence to professional audiences.
5. Prepare proposals for peer-reviewed funding.

### Admissions

Admission into the Epidemiology PhD program is based on completion of a baccalaureate degree, although it is anticipated that many applicants will have completed a

post baccalaureate degree in public health or other health related discipline.

### Fall semester application deadline: December 15

All required application documents must be submitted by the Epidemiology PhD program deadline, with the exception of recommendation letters, which may be submitted up to two weeks past the deadline.

### Admission requirements

1. Personal Statement
2. Résumé
3. Transcripts
4. Recommendations
5. Sample of Scholarly Writing
6. Proof of English Proficiency (applicants whose native language is not English)
7. Graduate Record Examination (GRE)

### Graduate Record Examination (GRE)

GRE or other graduate entrance exam scores are required for all applicants. In addition to the GRE, the Epidemiology PhD program also accepts scores from the MCAT, LSAT, GMAT, DAT. However, testing services other than the ETS (GRE) may not submit scores directly to the SOPHAS system. If your testing service does not submit scores to SOPHAS, you can have them sent directly to IUPUI.

### International applicants

Applicants who have attended post-secondary institutions outside of the U.S. are also required to submit the following supporting documentation to SOPHAS with their application:

### World Education Services (WES) ICAP evaluation of foreign academic credentials

The Indiana University Richard M. Fairbanks School of Public Health requires all applicants with foreign academic credentials to provide a World Education Services (WES) **ICAP course-by-course** evaluation of those credentials. Applicants should submit their transcripts to WES at least one month in advance of the application deadline to ensure that the evaluation is completed in time.

Please note: U.S. applicants who studied at foreign institutions as part of a study abroad experience at their U.S. college or university do not need to provide a WES evaluation of their study abroad coursework.

Updated: April 2023

## Doctor of Philosophy - Health Policy and Management PhD in Health Policy and Management

The PhD in Health Policy and Management program at the IU Richard M. Fairbanks School of Public Health is ideal for students who are interested in developing the analytical, methodological and professional skills needed to tackle the many health policy and management challenges facing Indiana, our nation, and the world.

As a core discipline within the field of public health, health policy and management focuses on the creation of

new knowledge that informs the advancement of health services delivery within and across the public, private, and nonprofit sectors. With a PhD degree in HPM, students will be well prepared to take on independent research roles as academic faculty members.

Students pursuing this degree must complete at least 90 credit hours that include advanced graduate coursework, passing a qualifying examination, and researching and defending a dissertation that makes an original contribution to the field.

The department's distinguished faculty members instruct, mentor, and collaborate closely with students. You'll benefit from working with faculty members who are nationally recognized for their research in health information technology, healthcare organizations, health policy and law, health impact assessment, and more. To support this research, faculty members have a diverse research funding portfolio that includes grants and contracts from the NIH, AHRQ, SAMHSA, NCAA, CDC, and numerous Indiana state agencies.

Students have access to outside expertise through the department's longstanding close collaborations with the IU School of Medicine, the Regenstrief Institute, the IU Kelley School of Business, the IU McKinney School of Law, the Indiana Clinical and Translational Sciences Institute, the Indiana Hospital Association, the Indiana State Department of Health, and top health systems and professional organizations throughout the state and nation.

### PhD in Health Policy and Management curriculum

The Health Policy and Management PhD program consists of 90 credit hours and can be completed on a full-time or part-time basis.

#### Public Health Foundations

Take all three courses for a total of nine credit hours. Some students will be able to transfer credit for these courses.

- P506 Population and Public Health (3 credits)
- H641 Ethics in Public Health (3 credits)
- B551 Biostatistics for Public Health I (3 credits)

#### Health Policy and Management Foundations

12 credits

- H786 Healthcare Organizations Research (3 credits)
- H670 (future H787) Health Policy Research (3 credits)

One of the following two:

- H658 Methods in Health Services and Policy Research (3 credits)\*
- S510 Introduction to Research Methods in Public Health (3 credits)\*

One of the following two:

- H619 Health Economics (3 credits)
- H514 Health Economics (3 credits)

\*PhD students may be expected to register for a different section of these courses and/or complete additional

assignments/tasks commensurate with the expectations of a doctoral course. PhD students with prior equivalent coursework will be expected to substitute a more advanced course in a related area.

### PhD seminars

13 credits

Students will be expected to take the HPM Research Seminar course four times for a total of 12 credit hours. These courses do not build on one another and need not be taken in order.

- H747 Health Policy and Management Research Seminar (12 credits)
- S725 Preparing for Academics in Public Health (1 credit)

### Methods and Skills courses

24 credits

#### Required courses

- B562 Biostatistics for Public Health II (3 credits)
- H644 Health Impact Assessment (3 credits)
- H781 Research Design in Health Policy and Management Research (3 credits)
- H782 Health Services Empirical Methods (Quantitative Methods) (3 credits)
- H783 Qualitative Methods for Health Services Research (3 credits)
- H657 Application of Cost-Effectiveness Analysis in Pub Health (3 credits)

#### Elective courses

Choose two of the following. Other courses may be substituted with program director approval.

- E606 Grant Writing for Public Health (3 credits)
- E710 Advanced Public Health Survey Methods (3 credits)
- E670 Systematic Reviews and Meta-analysis in Health Sciences (3 credits)

#### Minor area

12 credits

Students must complete a PhD minor. The minor must contain at least four graduate courses (12 credit hours) and comply with the requirements of the minor department/unit. Students wishing to complete a minor outside of the following should consult with the program director for guidance: epidemiology, biostatistics, social and behavioral sciences, health informatics, sociology, policy analysis.

#### Dissertation

20 credits

- H799 Dissertation Proposal (4 credits)
- H800 Dissertation Research (16 credits)

## Other requirements for the PhD in Health Policy and Management

### Public health coursework

Health Policy and Management PhD students without a graduate degree, certificate, or coursework in public health will be required to complete online introductory modules on environmental health and social and behavioral science to ensure they have basic competencies in all five core public health areas. This is a requirement of the Council on Education in Public Health (CEPH), the Fairbanks school's accrediting body.

### PhD advisory committee

The Department of Health Policy and Management will assign the student to an advisory committee after completion of the first year in the PhD program. The advisory committee will include at least two health policy and management faculty; one member may be from another discipline. The advisory committee will approve the student's program of study and counsel the student until he or she passes the qualifying examination. The chair of the PhD advisory committee will be a full-time faculty in the department of health policy and management. Faculty who meet the IUPUI Graduate School guidelines will be eligible to serve as dissertation advisors.

### Maintaining academic progress

Students must complete the PhD coursework (excluding the 20 credits of required mentored dissertation research) within seven years of matriculation into the program. After finishing their coursework, students have up to seven additional years to complete their dissertation. However, students must complete their coursework and dissertation within a 10-year period. All time limits are inclusive of any leaves of absence taken while enrolled in the program. Failure to complete coursework or dissertation within these time limits will result in dismissal from the program.

### Minor area

The student will select at least one minor from outside the department of health policy and management. The PhD minor typically includes four graduate-level courses, complies with requirements of the respective minor department or program, and must be approved by the student's advisory committee. Examples of minors include: bioethics, international research ethics, biostatistics, epidemiology, health economics, medical sociology, medical anthropology, nursing administration, business administration, and bioinformatics.

### Qualifying examinations

The written qualifying examination is designed to assess the student's attainment of the stated Health Policy and Management PhD competencies and is taken after the coursework for the PhD has been completed. Students who fail the qualifying examination are normally allowed to retake it once.

Students who have passed the qualifying examination must enroll each semester (excluding summer sessions) for dissertation credits. Once students have accumulated 90 credit hours in completed coursework and dissertation

credits, they may maintain continuous enrollment by enrolling in G901 for six credit hours at a cost of \$150. Students can enroll in G901 for no more than six semesters.

The department of health policy and management will monitor the students' progress toward the PhD degree and make recommendations to the University Graduate School Indianapolis regarding the nomination to candidacy, the appointment of a research committee, the defense of the dissertation, and the conferring of the PhD degree.

### Dissertation

The dissertation will be written on an original topic of research and presented as one of the final requirements for the Health Policy and Management PhD degree. The student's dissertation research committee will be comprised of members of the graduate faculty. The chair of the dissertation research committee must be a regular faculty member in the department of health policy and management, and a full member of the graduate faculty. The student will submit to the IUPUI Graduate Office, acting for the University Graduate School Indianapolis, a two-page prospectus of the dissertation research and the membership of the research committee at least six months before the defense of the dissertation.

After the committee has reviewed the dissertation, the decision to schedule the defense will be made. The student will then present and defend the dissertation orally in a public forum before the committee. Following the dissertation defense, all deficiencies must be adequately addressed to obtain approval by the dissertation research committee.

### Competencies

The PhD in Health Policy & Management focuses on 10 core competencies that serve as a measure of growth and criteria for assessment.

- Demonstrate in-depth knowledge of the history, structure, and operation of health care systems domestically and internationally.
- Understand and apply bioethical principles and theories, and utilize them in research, policy, and practice.
- Design and conduct health policy and services research studies.
- Access, manage, and utilize administrative and other secondary data sources in research studies.
- Prepare grant applications and manage research projects.
- Analyze and evaluate policies and programs.
- Utilize and report the results of advanced quantitative and qualitative data analysis.
- Interpret and report the findings of original research for scholarly audiences.
- Translate and apply findings from original and existing research in policy and practice.
- Educate and train students and professionals about health policy and management.

### Admissions

Students start the PhD program in the fall semester. The application deadline for fall admission is May 1 (April 1

for international students). Applications will be reviewed as they are received. The deadline to receive priority for financial support is January 5.

It is strongly recommended that all transcripts be submitted no later than four weeks prior to the application deadline to allow sufficient time for the required transcript verification process.

### Admission requirements

Admission to the Health Policy and Management PhD program at the IU Richard M. Fairbanks School of Public Health is based on completion of a baccalaureate degree, although it is anticipated that many applicants will have completed a post-baccalaureate degree in public health or other health-related discipline.

1. Personal Statement
2. Résumé
3. Transcripts
4. Recommendations
5. Sample of Scholarly Writing
6. Proof of English Proficiency (applicants whose native language is not English)
7. Graduate Record Examination (GRE)

### Graduation Record Examination (GRE)

While not required for admission, if you plan to attend the PhD program as a full-time funded student, you are strongly encouraged to submit GRE scores with your application, since some funding sources require current GRE scores (less than five years old) in order for students to be eligible. Applicants must submit GRE scores to SOPHAS using the following designation DI Code 0167.

### International applicants

Applicants who have attended post-secondary institutions outside of the U.S. are also required to submit the following supporting documentation to SOPHAS with their application:

### World Education Services (WES) ICAP evaluation of foreign academic credentials

The Indiana University Richard M. Fairbanks School of Public Health requires all applicants with foreign academic credentials to provide a World Education Services (WES) ICAP course-by-course evaluation of those credentials. Applicants should submit their transcripts to WES at least one month in advance of the application deadline to ensure that the evaluation is completed in time.

Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure electronic transmission. This expedites the delivery of the evaluation report—as well as images of the applicant's verified transcripts—to SOPHAS and allows SOPHAS to process the report most efficiently. [See more information.](#)

U.S. applicants who have attended post-secondary institutions outside of the U.S. as part of a study-abroad program at a U.S. college or university, do *not* need to provide a WES evaluation of their foreign coursework as long as it is noted on their U.S. transcript.

Updated: April 2023

## Master of Public Health - Global and Environmental Health

The Indiana University MPH Program can be completed part-time in three years, or full-time in two years. Most required MPH courses are offered face to face in the evening or online to accommodate working professionals. Through case studies, group and individual projects, and internships, students explore contemporary public health problems and issues, learn how to think critically and work in teams, and acquire skills they can immediately apply in diverse settings in Indiana and around the world. Courses are taught by scholars and practitioners from many disciplines and perspectives.

The MPH Program at IU School of Public Health is fully accredited by the Council on Education for Public Health.

### Global and Environmental Health

The MPH provides a balance of applied science and real-world experience, ensuring our graduates are prepared public health leaders. Learn to identify risks to human health, the environment, and formulate strategies for prevention. Our graduates work in industry, government, consultancies, and academia.

### Curriculum

To complete this degree, you will take a combination of Public Health Core Courses, Global Environmental Health Concentration Courses, Public Health Electives Courses, and Public Health Practical Experience Courses that together total 45 credits. The specific distribution of courses is as follows:

### Public Health Core Courses

- PBHL P510 Introduction to Public Health (3 credits)
- PBHL P511 Comprehensive Methods and Applications in Biostatistics and Epidemiology (3 credits)
- PBHL P512 Communication & Leadership (3 credits)
- PBHL P513 Planning, Evaluation & Management (3 credits)

### Global and Environmental Health Concentration Courses

- A641 Introduction to Global Health and Sustainable Development (3 credits) (Fall and Spring)
- A642 Poverty, Decent Work, and Inequality (3 credits) (Fall)
- A643 Food, Water and Sanitation (3 credits) (Fall)
- A644 Sustainable Production and Consumption (3 credits) (Spring)
- A645 Resilient Cities and Communities (3 credits) (Spring)
- A646 Preservation and Restoration of Land and Sea (3 credits) (Spring)

### Electives

*Choose 3 courses from the list*

- H613 Emergency Preparedness for Public Health (3 credits)

- A623 Management and Leadership in Health Protection (3 credits)
- A640 Public Health Applications of GIS (3 credits)
- A661 Fundamentals of Toxicology (3 credits)
- A662 Human Health Risk Assessment (3 credits)
- A680 Fundamentals of Product Stewardship (3 credits)
- H670 Study Abroad (3 credits)

### Global Environmental Health Practical Experience

- A602 Internship in Environmental Health Science (3 credits)
- A703 Environmental Health Science Final Concentration Project (3 credits)

### Certified Public Health Exam

MPH students entering the program fall 2021 and beyond are required to pass the CPH exam prior to graduation. More information on this requirement can be found at: <https://fsp.h.iupui.edu/academics/certifications.html>

### Competencies

The MPH in Environmental Health Science focuses on six core competencies that serve as a measure of growth and criteria for assessment.

### Global Environmental Health Science Concentration Competencies

- Apply a framework to anticipate, recognize, evaluate, prevent, and control environmental exposures that pose risks to human health.
- Assess and recommend prevention, control, and management strategies for global environmental health issues.
- Cultivate effective communication with diverse stakeholders on global and environmental health issues.
- Identify and examine barriers to health equity related to global environmental health issues.
- Identify and evaluate current and emerging societal, economic, and climatic issues, and regulatory frameworks that may affect the emergence of novel pathogens.
- Assess and apply best practices to prevent, control or attenuate epidemics and pandemics.

### Admission Criteria

- Baccalaureate degree from an accredited university or college.
- Official GRE scores, if cumulative undergraduate GPA from all universities attended is below 3.0.
- Minimum of one year of undergraduate mathematics (e.g., algebra, statistics, or finite math).
- Competent written and oral communication skills.
- Students meeting these requirements are not guaranteed admission. Other admission factors include references, work experience, the personal statement, and personal interview (if applicable).

MPH applications and supplemental materials must be submitted to SOPHAS (Schools of Public Health Application Service). SOPHAS is meant to facilitate

the collection of common application materials and general information. For more information and frequently asked questions please visit [sophas.org](http://sophas.org). In addition to the SOPHAS application all applicants will be required to complete a short application to the IUPUI (Indiana University-Purdue University Indianapolis) Online Graduate and Professional Admissions Application system at the link provided within the SOPHAS application.

### Admission Requirements

1. Personal Statement
2. Resume
3. Transcripts
4. Recommendations
5. Graduate Record Examination (GRE) if GPA is below 3.0

### Graduate Record Examination (GRE)

Applicants who have earned a cumulative undergraduate GPA of below a 3.0 are required to submit official scores from the GRE taken within the past 5 years. International applicants whose undergraduate work was completed at institutions outside of the U.S. or Canada are required to submit scores from the GRE regardless of cumulative GPA. The cumulative undergraduate GPA is calculated using all undergraduate grades earned from all colleges and universities attended. The GRE is not required of applicants who have a graduate or professional degree from a U.S. or Canadian college or university. The following exams can be substituted for the GRE: DAT, ECFMG, LSAT, OAT, GMAT, MCAT, or USMLE (steps one and two).

### International Applicants

Test of English as a Foreign Language (TOEFL)  
The Indiana University Fairbanks School of Public Health requires applicants whose native language is not English or whose academic study was done exclusively at non-English speaking institutions to prove English proficiency by providing either official Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores. Scores must be under two years old

Updated April 12, 2022

## Master of Public Health - Health Policy and Management

The Fairbanks School of Public Health MPH program is a unique program that can be completed on a part-time basis in three years, or on a full-time basis in two years. We have an online or in-person option. Most of the required MPH courses are offered in the evening to allow working professionals the opportunity to continue their education.

Through case studies, group and individual projects, and internships, students will explore public health problems and issues, learn how to think critically and work in teams. Courses are taught by scholars and practitioners drawn from many disciplines and perspectives.

The MPH program at the Fairbanks School of Public Health is fully accredited by the Council on Education



for Public Health (CEPH) and accredited internationally with the Agency for Public Health Education Accreditation (APHEA).

### Health Policy and Management curriculum online and in-person

All MPH candidates must satisfactorily complete a minimum of 45 credits. For those pursuing the Health Policy and Management concentration, the curriculum includes required core courses, Health Policy and Management courses, and elective courses. In addition, each student must complete an internship and a final concentration project.

To complete this degree, you will take a combination of public health core courses, HPM concentration courses, public health electives courses, and public health practical experience courses that together total 45 credits. The specific distribution of courses is as follows:

#### Master of Public Health core

Take all four courses for a total of 12 credits

- PBHL P510 Introduction to Public Health (3 credits)
- PBHL P511 Comprehensive Methods and Applications in Biostatistics and Epidemiology (3 credits)
- PBHL P513 Planning, Evaluation & Management in Public Health (3 credits)
- PBHL P512 Communication and Leadership in Public Health (3 credits)

#### Health Policy and Management concentration courses

Take all six courses for a total of 18 credits

- H611 Policy Design, Implementation & Management (3 credits)
- H616 Leading Public Health Service Organizations (3 credits)
- H619 Financial Management for Public Health Organizations (3 credits)
- H628 Healthcare Information Systems (3 credits)
- H641 Public Health Ethics (3 credits)
- H658 Research Concepts in Health Policy and Management (3 credits)

#### Health Policy and Management elective courses

- H501 U.S. Health Care Systems and Health Policy (3 credits)
- H621 Grant Writing and Administration for Public Health (3 credits)
- H613 Emergency Preparedness for Public Health (3 credits)
- H644 Health Impact Assessment (3 credits)
- H624 Developing Strategic Capabilities (3 credits)
- H657 Cost-Effectiveness (3 credits)
- H639 Law, Poverty and Population Health (3 credits)
- E601 Advanced Epidemiology (3 credits)
- A640 Public Health Applications of GIS (3 credits)

#### Public Health practical experience

Take both courses for a total of 6 credits

- H602 Public Health Internship (3 credits) – 240 total hours required; 200 of these hours must be completed prior to gaining course authorization for the capstone experience
- H711 Capstone Experience in Health Policy and Management (3 credits)

#### Competencies

The MPH in Health Policy & Management focuses on five core competencies that serve as a measure of growth and criteria for assessment.

1. Propose policy solutions that could be recommended to management.
2. Apply public health ethical concepts and analytical frameworks to current local, national, or international public health events.
3. Identify a policy recommendation through analysis of multiple policy alternatives, evaluating potential strengths and weaknesses of each.
4. Identify characteristics of leadership in healthcare or public health.
5. Apply the diverse segments of financial management to an understanding of the financial viability of a public health organization.

#### Admission criteria and requirements

##### Criteria

- Baccalaureate degree from an accredited university or college.
- Minimum of one year of undergraduate mathematics (e.g. algebra, statistics, or finite math).
- Competent written and oral communication skills.
- Students meeting these requirements are not guaranteed admission. Other admission factors include references, work experience, the personal statement, and personal interview (if applicable).

MPH applications and supplemental materials must be submitted to SOPHAS (Schools of Public Health Application Service). SOPHAS is meant to facilitate the collection of common application materials and general information. For more information and frequently asked questions please visit [sophas.org](https://sophas.org).

##### Graduate Record Examination (GRE)

GRE scores are not required for admission. To strengthen the application, GRE scores are strongly recommended if the cumulative GPA from all undergraduate institutions attended is below 3.0. Official GRE test scores taken within the past five years are acceptable.

##### Personal statement

The personal statement should contain only responses to the following five questions. Students must upload their responses to the Personal Statement section of SOPHAS.

Please answer each of the following five questions in a concise and well-written short answer format. Responses to each question should not exceed 100 words (500 words total for all five questions).

- Where did your interest in public health originate?
- Why are you interested in the Fairbanks School of Public Health?

- Which MPH concentrations are you pursuing and why?
- What do you think you might be doing professionally five years from now? Please list two possibilities.
- What do you think are the most pressing public health issues at this time?

### Résumé

For each position on the résumé or CV, provide the job title, employing agency, dates employed, and responsibilities held. Indicate any additional strengths or skills such as fluency in foreign languages, research experience, teaching experience, community service, and demonstration of leadership skills. Include professional certifications, honors, and awards.

Your résumé or CV can be uploaded electronically into SOPHAS and should not be mailed.

### Transcript

#### U.S. or Canadian transcripts

Official post-secondary transcripts from all U.S. institutions attended (must be sent directly from the institutions to SOPHAS). This includes previous study at Indiana University campuses. U.S. applicants who studied at foreign institutions as part of a study abroad experience at their U.S. college or university do not need to provide a WES evaluation of their study abroad coursework.

Applicants are required to enter all U.S. coursework. Entering U.S. coursework allows SOPHAS to calculate GPAs that institutions use in reviewing applications, provides a way for institutions to review applications using electronic review forms and also allows for a mechanism to gather aggregate information about prior coursework. SOPHAS uses official transcripts to verify the self-reported coursework. This process significantly expedites the institution review process.

For regular mail, please send your transcript to:

SOPHAS  
P.O. Box 9111  
Watertown, MA 02471-9111

#### For overnight delivery only:

SOPHAS  
c/o Liaison International  
311 Arsenal Street  
Watertown, MA 02472  
Phone: 617-612-2090

Applicants who have not earned a degree at the time of application submission will be required to submit an official transcript upon acceptance to the IU Fairbanks School of Public Health. This official transcript should indicate your degree earned and date of conferral. If you did not earn your degree at the time you applied to SOPHAS, please send an updated official transcript with degree earned and date of conferral to:

IU Fairbanks School of Public Health  
Office of Student Services and Admissions  
Attn: Cher Pearcy  
1050 Wishard Blvd., 5th Floor  
Indianapolis, IN 46202

### Foreign transcripts

All applicants with foreign academic credentials must provide a World Education Services (WES) ICAP course-by-course evaluation of those credentials. Because this process can take some time, applicants should submit their transcripts to WES at least one month in advance of the application deadline.

Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure electronic transmission. This expedites the delivery of the evaluation report as well as images of the applicant's verified transcripts to SOPHAS and allows SOPHAS to process the report most efficiently.

### Letters of recommendation

Three letters of recommendation are required from academic/professional sources that can provide an unbiased critical assessment of your abilities, skills, strengths, and weaknesses. Examples of academic/professional sources are professors, academic advisors, internship preceptors, or immediate supervisors. Examples of sources that are not acceptable include coworkers, colleagues, teaching assistants, classmates, ministers, and relatives.

Recommendation letters must be submitted electronically to SOPHAS.

### Interview

Interviewees are invited at the discretion of the admission committee.

The MPH admissions committee conducts interviews using Skype video conferencing for applicants who are unable to travel to Indianapolis for the interview. Skype is a free software application that allows users to connect through the internet to communicate. Note that applicants will need access to a webcam and microphone for the interview.

### International applicants

#### Test of English as a Foreign Language (TOEFL)

The Indiana University Fairbanks School of Public Health requires applicants whose native language is not English or whose academic study was done exclusively at non-English speaking institutions to prove English proficiency by providing either official Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores. Scores must be under two years old.

The preferred minimum English language test scores for admission to the Fairbanks School of Public Health are:

- Internet-based TOEFL: minimum score of 92
- Computer-based TOEFL: minimum score of 263
- Paper-based TOEFL: minimum score of 620
- IELTS (total band score): minimum score of 7

Applicants must submit:

- [TOEFL](#) scores to SOPHAS using the following designation DI Code 5688.
- [IELTS](#) scores must be uploaded electronically to SOPHAS.

## English Placement Test

- International applicants who reside in the U.S. at the time of application must submit TOEFL, ILETS or IUPUI EAP (English for Academic Purposes) exam scores.
- International applicants who do not reside in the U.S. at the time of application must submit their TOEFL or IELTS scores with their application and, if admitted to the MPH program, also complete an EAP Exam upon arrival to Indianapolis.
- The USMLE and ECFMG do not fulfill the required proof of English proficiency when applying to the MPH program. Applicants who have passed the USMLE or ECFMG must also submit TOEFL, IELTS or EAP scores.

To schedule a test date and time please call the testing center at 317-274-2620.

## WES evaluations of transcripts

### Foreign transcripts

All applicants with foreign academic credentials must provide a World Education Services (WES) ICAP course-by-course evaluation of those credentials. Because this process can take some time, applicants should submit their transcripts to WES at least one month in advance of the application deadline.

Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure electronic transmission. This expedites the delivery of the evaluation report as well as images of the applicant's verified transcripts to SOPHAS and allows SOPHAS to process the report most efficiently.

[See more information on WES](#)

DO NOT mail any other documents to SOPHAS, including thesis, dissertations, or pre-secondary or secondary transcripts.

International applicants will be required to submit official transcripts, marksheets and diplomas from all colleges and universities attended to the IUPUI Office of International Affairs (OIA). OIA will evaluate your transcripts to determine if eligibility requirements for graduate study have been met.

Please mail transcripts, marksheets and diploma to:

Office of International Affairs  
Indiana University-Purdue University in Indianapolis  
902 W. New York Street, ES2126  
Indianapolis, IN 46202

Office: (317) 274-7000

Fax: (317) 274-2213

Email: [intlaff@iupui.edu](mailto:intlaff@iupui.edu)

Web: [international.iupui.edu](http://international.iupui.edu)

Updated: April 2023

## Master of Public Health - Public Health Informatics

The Indiana University MPH program is a unique program that can be completed on a part-time basis in three years, or on a full-time basis in two years. Most of the required

MPH courses are offered in the evening to allow working professionals the opportunity to continue their education.

Through case studies, group and individual projects, and internships, students will explore public health problems and issues, learn how to think critically, and work in teams. Courses are taught by scholars and practitioners drawn from many disciplines and perspectives.

The MPH program at IU School of Public Health is fully accredited by the Council on Education for Public Health.

### Public Health Informatics

The Master of Public Health (MPH) provides a balance of academic theory and real-world experience, ensuring students are prepared for a career in public health. Public health informatics (PHI) studies and applies information science and computing techniques to public health practice.

The MPH degree with a concentration in PHI provides a foundation for engineering data and information systems within health systems, as well as governmental and non-profit public health organizations to support the collection, storage, management, analysis, application and sharing of information to improve population health outcomes.

Students will learn how to think critically about population level data and apply informatics approaches to address pressing public health issues, such as the integration of comprehensive care services for vulnerable populations, engaging populations in healthy behaviors using information technologies, regional and global health surveillance, management of very large data sets across the health system, comparative effectiveness analysis, and appropriate use of population health data analytics to influence public health programs and policies.

### Competencies

The MPH in Public Health Informatics focuses on five core competencies that serve as a measure of growth and criteria for assessment.

- Propose informatics strategies that support or improve work processes within health care and public health organizations.
- Apply analytics to the discovery, interpretation, and communication of population health data.
- Evaluate the impact of information systems and informatics interventions on population health outcomes.
- Generalize computer and information science methods to the capture, storage, management, exchange and use of data among health care and public health organizations.
- Apply available data and information standards to the design, implementation and use of informatics systems that enhance the public health infrastructure.

### Public Health Informatics curriculum

To earn the MPH degree with a concentration in PHI, you must satisfactorily complete a minimum of 45 credits that include a combination of core public health courses, public health informatics courses, elective courses, an internship,

and a final concentration project. The specific distribution of courses is as follows:

### Public Health core courses

Take all four courses for a total of 12 credits

- PBHL P510 Introduction to Public Health (3 credits)
- PBHL P511 Comprehensive Methods and Applications in Biostatistics and Epidemiology (3 credits)
- PBHL P513 Planning, Evaluation & Management (3 credits)
- PBHL P512 Communication & Leadership (3 credits)

### Public Health Informatics concentration courses

Take all six courses for a total of 18 credits

- PBHL-B 552 Fundamentals of Data Management (3 credits)
- PBHL-E 635 Foundations in Public Health Informatics (3 credits)
- PBHL-H 521 Management Science for Health Services Administration (3 credits)
- PBHL-H 628 Healthcare Information Systems (3 credits)
- PBHL-E 645 Information Exchange for Population Health (3 credits)
- PBHL-E 647 Introduction to Population Health Analytics (3 credits)

### Public Health Informatics elective courses

Select two courses for a total of six credits

- PBHL-H 781 Research Designs in Health Policy & Management (3 credits)
- PBHL-A 640 Public Health Applications of GIS (3 credits)
- INFO-B 581 Health Informatics Standards and Terminologies (3 credits)
- INFO-B 585 Biomedical Analytics (3 credits)
- INFO-B 642 Clinical Decision Support Systems (3 credits)
- INFO-H 515 Introduction to Data Analytics (3 credits)
- INFO-H 517 Visualization Design, Analysis, and Evaluation (3 credits)

Select one course for a total of three credits

- PBHL-B 652 Biostatistics for Public Health II (3 credits)
- PBHL-E 601 Advanced Epidemiology (3 credits)
- PBHL-E 609 Infectious Disease Epidemiology (3 credits)
- PBHL-H 641 Ethics in Public Health (3 credits)
- PBHL-H 657 Application of Cost-Effectiveness Analysis in Public Health (3 credits)

### Public Health practical experience

Take six credits

- PBHL-E 603 Public Health Informatics Internship (3 credits) - 240 total hours required: 160 of these hours must be conducted onsite

- PBHL-E 706 Informatics Concentration Project (3 credits)

## Admission criteria and requirements

### Criteria

- Baccalaureate degree from an accredited university or college.
- Minimum of one year of undergraduate mathematics (e.g. algebra, statistics, or finite math).
- Competent written and oral communication skills.
- Students meeting these requirements are not guaranteed admission. Other admission factors include references, work experience, the personal statement, and personal interview (if applicable).

MPH applications and supplemental materials must be submitted to SOPHAS (Schools of Public Health Application Service). SOPHAS is meant to facilitate the collection of common application materials and general information. For more information and frequently asked questions please visit [sophas.org](https://sophas.org).

### Graduate Record Examination (GRE)

GRE scores are not required for admission. To strengthen the application, GRE scores are strongly recommended if the cumulative GPA from all undergraduate institutions attended is below 3.0. Official GRE test scores taken within the past five years are acceptable.

### Personal statement

The personal statement should contain only responses to the following five questions. Students must upload their responses to the Personal Statement section of SOPHAS.

Please answer each of the following five questions in a concise and well-written short answer format. Responses to each question should not exceed 100 words (500 words total for all five questions).

- Where did your interest in public health originate?
- Why are you interested in the Fairbanks School of Public Health?
- Which MPH concentrations are you pursuing and why?
- What do you think you might be doing professionally five years from now? Please list two possibilities.
- What do you think are the most pressing public health issues at this time?

### Résumé

For each position on the résumé or CV, provide the job title, employing agency, dates employed, and responsibilities held. Indicate any additional strengths or skills such as fluency in foreign languages, research experience, teaching experience, community service, and demonstration of leadership skills. Include professional certifications, honors, and awards.

Your résumé or CV can be uploaded electronically into SOPHAS and should not be mailed.

### Transcript

#### U.S. or Canadian transcripts

Official post-secondary transcripts from all U.S. institutions attended (must be sent directly from the institutions

to SOPHAS). This includes previous study at Indiana University campuses. U.S. applicants who studied at foreign institutions as part of a study abroad experience at their U.S. college or university do not need to provide a WES evaluation of their study abroad coursework.

Applicants are required to enter all U.S. coursework. Entering U.S. coursework allows SOPHAS to calculate GPAs that institutions use in reviewing applications, provides a way for institutions to review applications using electronic review forms and also allows for a mechanism to gather aggregate information about prior coursework. SOPHAS uses official transcripts to verify the self-reported coursework. This process significantly expedites the institution review process.

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SOPHAS  
P.O. Box 9111  
Watertown, MA 02471-9111

**For overnight delivery only:**

SOPHAS  
c/o Liaison International  
311 Arsenal Street  
Watertown, MA 02472  
Phone: 617-612-2090

Applicants who have not earned a degree at the time of application submission will be required to submit an official transcript upon acceptance to the IU Fairbanks School of Public Health. This official transcript should indicate your degree earned and date of conferral. If you did not earn your degree at the time you applied to SOPHAS, please send an updated official transcript with degree earned and date of conferral to:

IU Fairbanks School of Public Health  
Office of Student Services and Admissions  
Attn: Cher Percy  
1050 Wishard Blvd., 5th Floor  
Indianapolis, IN 46202

**Foreign transcripts**

All applicants with foreign academic credentials must provide a World Education Services (WES) ICAP course-by-course evaluation of those credentials. Because this process can take some time, applicants should submit their transcripts to WES at least one month in advance of the application deadline.

Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure electronic transmission. This expedites the delivery of the evaluation report as well as images of the applicant's verified transcripts to SOPHAS and allows SOPHAS to process the report most efficiently.

**Letters of recommendation**

Three letters of recommendation are required from academic/professional sources that can provide an unbiased critical assessment of your abilities, skills, strengths, and weaknesses. Examples of academic/professional sources are professors, academic advisors, internship preceptors, or immediate supervisors. Examples of sources that are not acceptable include

coworkers, colleagues, teaching assistants, classmates, ministers, and relatives.

Recommendation letters must be submitted electronically to SOPHAS.

**Interview**

Interviewees are invited at the discretion of the admission committee.

The MPH admissions committee conducts interviews using Skype video conferencing for applicants who are unable to travel to Indianapolis for the interview. Skype is a free software application that allows users to connect through the internet to communicate. Note that applicants will need access to a webcam and microphone for the interview.

**International applicants**

**Test of English as a Foreign Language (TOEFL)**

The Indiana University Fairbanks School of Public Health requires applicants whose native language is not English or whose academic study was done exclusively at non-English speaking institutions to prove English proficiency by providing either official Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores. Scores must be under two years old.

The preferred minimum English language test scores for admission to the Fairbanks School of Public Health are:

- Internet-based TOEFL: minimum score of 92
- Computer-based TOEFL: minimum score of 263
- Paper-based TOEFL: minimum score of 620
- IELTS (total band score): minimum score of 7

Applicants must submit:

- [TOEFL](#) scores to SOPHAS using the following designation DI Code 5688.
- [IELTS](#) scores must be uploaded electronically to SOPHAS.

**English Placement Test**

- International applicants who reside in the U.S. at the time of application must submit TOEFL, ILETS or IUPUI EAP (English for Academic Purposes) exam scores.
- International applicants who do not reside in the U.S. at the time of application must submit their TOEFL or IELTS scores with their application and, if admitted to the MPH program, also complete an EAP Exam upon arrival to Indianapolis.
- The USMLE and ECFMG do not fulfill the required proof of English proficiency when applying to the MPH program. Applicants who have passed the USMLE or ECFMG must also submit TOEFL, IELTS or EAP scores.

To schedule a test date and time please call the testing center at 317-274-2620.

**WES evaluations of transcripts**

**Foreign transcripts**

All applicants with foreign academic credentials must provide a World Education Services (WES) ICAP course-by-course evaluation of those credentials. Because this process can take some time, applicants should submit their transcripts to WES at least one month in advance of the application deadline.

Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure electronic transmission. This expedites the delivery of the evaluation report as well as images of the applicant's verified transcripts to SOPHAS and allows SOPHAS to process the report most efficiently.

[See more information on WES](#)

DO NOT mail any other documents to SOPHAS, including thesis, dissertations, or pre-secondary or secondary transcripts.

International applicants will be required to submit official transcripts, marksheets and diplomas from all colleges and universities attended to the IUPUI Office of International Affairs (OIA). OIA will evaluate your transcripts to determine if eligibility requirements for graduate study have been met.

Please mail transcripts, marksheets and diploma to:

Office of International Affairs  
Indiana University-Purdue University in Indianapolis  
902 W. New York Street, ES2126  
Indianapolis, IN 46202

Office: (317) 274-7000  
Fax: (317) 274-2213  
Email: [intlaff@iupui.edu](mailto:intlaff@iupui.edu)  
Web: [international.iupui.edu](http://international.iupui.edu)

Updated: April 2023

## Master of Public Health - Social and Behavioral Sciences

The Indiana University MPH program is a unique program that can be completed on a part-time basis in three years, or on a full-time basis in two years. It can be completed in a traditional classroom format or fully online format. Most of the required MPH courses are offered in the evening to allow working professionals the opportunity to continue their education.

Through classroom and community learning experiences, case studies, group and individual projects, and internships, students will explore public health problems and issues, learn how to think critically, and work in teams. At the completion of the curriculum, students will have a number of products created that demonstrate to employers their skills in advancing social and community systems change to improve health outcomes. Courses are taught by scholars and practitioners drawn from many disciplines and perspectives.

The MPH program at IU School of Public Health is fully accredited by the Council on Education for Public Health.

### Social and Behavioral Sciences

The Master of Public Health (MPH) provides a balance of academic theory and real-world experience, ensuring students are well prepared for a career in public health or

to pursue further education. The Social and Behavioral Sciences (SBS) concentration is a great choice for those who want to have an impact on population health. Students learn how to: implement community health education programs, develop and advocate for policies that advance social justice to improve public health, implement community health promotion, and address societal determinants of health.

### Social and Behavioral Sciences concentration competencies

1. Produce at least one advocacy strategy to address public health priorities.
  1. Write a health policy brief in health promotion and disease prevention
2. Design communication tools to optimize individual and/or community health across different audiences.
  1. Develop and produce a community solutions podcast episode in health promotion and disease prevention
3. Design, implement, and analyze research studies, in collaboration with a community agency, to address an agency-identified public health issue
  1. Develop and implement and analyze a qualitative study in qualitative research methods.
4. Construct in partnership with a community agency a program implementation and evaluation plan to address an agency-identified public health issue.
  1. Develop a community health program in ILE1: Advanced Program Planning, and an associated evaluation plan in ILE2: Research Methods and Program Evaluation
5. Develop a grant proposal and fundraising case statement to advance a community agency's programming and mission.
  1. Develop a grant proposal and fundraising case statement for a community health plan in ILE2: Research Methods and Program Evaluation and ILE1: Advanced Program Planning, respectively.

### Social and Behavioral Sciences curriculum

To complete this degree, you will take a combination of public health core courses, SBS concentration courses, public health elective courses, and public health practical experience courses that together total 45 credits. The specific distribution of courses is as follows:

#### Public Health core courses

*Take all four courses for a total of 12 credits*

- PBHL P510 Introduction to Public Health (3 credits)
- PBHL P511 Comprehensive Methods and Applications in Biostatistics and Epidemiology (3 credits)
- PBHL P513 Planning, Evaluation & Management (3 credits)
- PBHL P512 Communication & Leadership (3 credits)

## Social and Behavioral Science concentration courses

Take all seven courses for a total of 21 credits

- S615 Qualitative Methods (3 credits)
- S617 Health Promotion & Disease Prevention (3 credits)
- S620 A Biopsychosocial Approach to Stress (3 credits)
- S619 Health Disparities and Health Equity (3 credits)
- S605 Public Health Biology (1 credit)
- S662 Integrated Learning Experience 1: Advanced Program Planning (4 credits)
- S664 Integrated Learning Experience 2: Research Methods and Program Evaluation
  - \*200 of the 240 hours for the required internship (S 602) must be completed prior to gaining course authorization for this course

All students will choose a focus area of either "Global Maternal and Child Health" or "Public Health Communications" and take two courses for six credits in their chosen focus area

### Global Maternal and Child Health

- S630 Global Maternal and Child Health (3 credits)
- S635 A Biosocial Approach to Global Health (3 credits)

### Public Health Communication

- S625 Applied Public Health Campaigns (3 credits)
- S622 Coaching for Health and Wellness (3 credits)

## Social and Behavioral Sciences elective courses

Select one course for a total of three credits. If a course below is not in your selected focus area of either "Global Maternal and Child Health" or "Public Health Communications," it can be taken as an elective.

- A641 Introduction to Global Health and Sustainable Development (3 credits)
- S622 Coaching for Health Behavior Change (3 credits)
- S625 Applied Public Health Campaigns (3 credits)
- S631 Maternal and Family Child Health (3 credits)
- S640 Culture and Health (3 credits)
- S635 A Biosocial Approach to Global Health (3 credits)
- S630 Global Maternal Health (3 credits)

### Public Health practical experience

Take the course below for a total of three credits

- S602 Public Health Internship (3 credits) – 240 total hours required; 200 of these hours must be completed prior to gaining course authorization for the Capstone Course.

## Admission criteria and requirements

### Criteria

- Baccalaureate degree from an accredited university or college.

- Minimum of one year of undergraduate mathematics (e.g. algebra, statistics, or finite math).
- Competent written and oral communication skills.
- Students meeting these requirements are not guaranteed admission. Other admission factors include references, work experience, the personal statement, and personal interview (if applicable).

MPH applications and supplemental materials must be submitted to SOPHAS (Schools of Public Health Application Service). SOPHAS is meant to facilitate the collection of common application materials and general information. For more information and frequently asked questions please visit [sophas.org](http://sophas.org).

### Graduate Record Examination (GRE)

GRE scores are not required for admission. To strengthen the application, GRE scores are strongly recommended if the cumulative GPA from all undergraduate institutions attended is below 3.0. Official GRE test scores taken within the past five years are acceptable.

### Personal statement

The personal statement should contain only responses to the following five questions. Students must upload their responses to the Personal Statement section of SOPHAS.

Please answer each of the following five questions in a concise and well-written short answer format. Responses to each question should not exceed 100 words (500 words total for all five questions).

- Where did your interest in public health originate?
- Why are you interested in the Fairbanks School of Public Health?
- Which MPH concentrations are you pursuing and why?
- What do you think you might be doing professionally five years from now? Please list two possibilities.
- What do you think are the most pressing public health issues at this time?

### Résumé

For each position on the résumé or CV, provide the job title, employing agency, dates employed, and responsibilities held. Indicate any additional strengths or skills such as fluency in foreign languages, research experience, teaching experience, community service, and demonstration of leadership skills. Include professional certifications, honors, and awards.

Your résumé or CV can be uploaded electronically into SOPHAS and should not be mailed.

### Transcript

#### U.S. or Canadian transcripts

Official post-secondary transcripts from all U.S. institutions attended (must be sent directly from the institutions to SOPHAS). This includes previous study at Indiana University campuses. U.S. applicants who studied at foreign institutions as part of a study abroad experience at their U.S. college or university do not need to provide a WES evaluation of their study abroad coursework.

Applicants are required to enter all U.S. coursework. Entering U.S. coursework allows SOPHAS to calculate

GPA that institutions use in reviewing applications, provides a way for institutions to review applications using electronic review forms and also allows for a mechanism to gather aggregate information about prior coursework. SOPHAS uses official transcripts to verify the self-reported coursework. This process significantly expedites the institution review process.

For regular mail, please send your transcript to:

SOPHAS  
P.O. Box 9111  
Watertown, MA 02471-9111

**For overnight delivery only:**

SOPHAS  
c/o Liaison International  
311 Arsenal Street  
Watertown, MA 02472  
Phone: 617-612-2090

Applicants who have not earned a degree at the time of application submission will be required to submit an official transcript upon acceptance to the IU Fairbanks School of Public Health. This official transcript should indicate your degree earned and date of conferral. If you did not earn your degree at the time you applied to SOPHAS, please send an updated official transcript with degree earned and date of conferral to:

IU Fairbanks School of Public Health  
Office of Student Services and Admissions  
Attn: Cher Percy  
1050 Wishard Blvd., 5th Floor  
Indianapolis, IN 46202

**Foreign transcripts**

All applicants with foreign academic credentials must provide a World Education Services (WES) ICAP course-by-course evaluation of those credentials. Because this process can take some time, applicants should submit their transcripts to WES at least one month in advance of the application deadline.

Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure electronic transmission. This expedites the delivery of the evaluation report as well as images of the applicant's verified transcripts to SOPHAS and allows SOPHAS to process the report most efficiently.

**Letters of recommendation**

Three letters of recommendation are required from academic/professional sources that can provide an unbiased critical assessment of your abilities, skills, strengths, and weaknesses. Examples of academic/professional sources are professors, academic advisors, internship preceptors, or immediate supervisors. Examples of sources that are not acceptable include coworkers, colleagues, teaching assistants, classmates, ministers, and relatives.

Recommendation letters must be submitted electronically to SOPHAS.

**Interview**

Interviewees are invited at the discretion of the admission committee.

The MPH admissions committee conducts interviews using Skype video conferencing for applicants who are unable to travel to Indianapolis for the interview. Skype is a free software application that allows users to connect through the internet to communicate. Note that applicants will need access to a webcam and microphone for the interview.

**International applicants**

**Test of English as a Foreign Language (TOEFL)**

The Indiana University Fairbanks School of Public Health requires applicants whose native language is not English or whose academic study was done exclusively at non-English speaking institutions to prove English proficiency by providing either official Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores. Scores must be under two years old.

The preferred minimum English language test scores for admission to the Fairbanks School of Public Health are:

- Internet-based TOEFL: minimum score of 92
- Computer-based TOEFL: minimum score of 263
- Paper-based TOEFL: minimum score of 620
- IELTS (total band score): minimum score of 7

Applicants must submit:

- [TOEFL](#) scores to SOPHAS using the following designation DI Code 5688.
- [IELTS](#) scores must be uploaded electronically to SOPHAS.

**English Placement Test**

- International applicants who reside in the U.S. at the time of application must submit TOEFL, IELTS or IUPUI EAP (English for Academic Purposes) exam scores.
- International applicants who do not reside in the U.S. at the time of application must submit their TOEFL or IELTS scores with their application and, if admitted to the MPH program, also complete an EAP Exam upon arrival to Indianapolis.
- The USMLE and ECFMG do not fulfill the required proof of English proficiency when applying to the MPH program. Applicants who have passed the USMLE or ECFMG must also submit TOEFL, IELTS or EAP scores.

To schedule a test date and time please call the testing center at 317-274-2620.

**WES evaluations of transcripts**

**Foreign transcripts**

All applicants with foreign academic credentials must provide a World Education Services (WES) ICAP course-by-course evaluation of those credentials. Because this process can take some time, applicants should submit their transcripts to WES at least one month in advance of the application deadline.



Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure electronic transmission. This expedites the delivery of the evaluation report as well as images of the applicant's verified transcripts to SOPHAS and allows SOPHAS to process the report most efficiently.

[See more information on WES](#)

DO NOT mail any other documents to SOPHAS, including thesis, dissertations, or pre-secondary or secondary transcripts.

International applicants will be required to submit official transcripts, marksheets and diplomas from all colleges and universities attended to the IUPUI Office of International Affairs (OIA). OIA will evaluate your transcripts to determine if eligibility requirements for graduate study have been met.

Please mail transcripts, marksheets and diploma to:

Office of International Affairs  
Indiana University-Purdue University in Indianapolis  
902 W. New York Street, ES2126  
Indianapolis, IN 46202

Office: (317) 274-7000  
Fax: (317) 274-2213  
Email: [intlaff@iupui.edu](mailto:intlaff@iupui.edu)  
Web: [international.iupui.edu](http://international.iupui.edu)

Updated: April 2023

## Master of Science in Global Health and Sustainable Development

A united worldwide effort is underway to accelerate solutions to the world's most complex and urgent global public health challenges. The MS in Global Health and Sustainable Development program is designed for early to mid-careerists who would like a broad, contemporary foundation of knowledge, skills, and abilities in global health. Graduates apply their expertise in varied roles that contribute to meeting global health goals that aim to improve health and wellbeing for people everywhere.

The global action plan led by the World Health Organization and other leading health and development organizations includes strategies that emphasize effective, sustainable policies and programs that, in addition to health and well-being, also prioritize health equity and social justice as prerequisites for health and wellbeing for all. Our program supports these goals.

We value an interdisciplinary approach to learning about global health that brings to bear relevant knowledge from a broad range of disciplines using an integrated, practical approach. In addition to foundational public health knowledge based in the natural and social sciences, we also value contributions from the arts and humanities that serve to ensure the wholistic perspective necessary for achieving goals across cultures, whether at home or abroad.

The MS in Global Health and Sustainable Development program is delivered online. Most classes include an optional synchronous virtual meeting that is recorded for students with time conflict to watch asynchronously. You

must have a reliable, high-speed Internet connection to participate in the program.

We welcome students from Indiana and around the world. We strive for diversity in our study body in the firm belief that diverse perspectives brought to bear in the classroom improve the quality of learning for all.

More information about program logistics is provided during an online program orientation meeting or by speaking directly to a program representative.

### What you will learn

The curriculum consists of 30 credit hours comprised of four 3-credit hour general core courses in public health and six additional 3-credit hour courses on a variety of global public health topics.

### Curriculum

#### Public Health core courses

*Take all four courses for a total of 12 credits*

- P510 Introduction to Public Health (3 credits)
- P511 Comprehensive Methods and Applications in Biostatistics and Epidemiology (3 credits)
- P512 Communication & Leadership (3 credits)
- P513 Planning, Evaluation & Management (3 credits)

#### Global Health and Sustainable Development concentration courses

*Take all six courses for a total of 18 credits*

- A641 Introduction to Global Health and Sustainable Development (3 credits)
- A642 Poverty, Decent Work, and Inequality (3 credits)
- A643 Water and Sanitation (3 credits)
- A644 Sustainable Production and Consumption (3 credits)
- A645 Resilient Cities and Communities (3 credits)
- A646 Preservation and Restoration of Land and Sea (3 credits)

As the UN Sustainable Development Goals evolve and change over time, we will likewise continuously update our courses to reflect current global public health action priorities.

However, our program also aims to prepare students with specific competencies that withstand the test of time. Once mastered, these program competencies provide graduates with the skills and abilities to adapt and effectively meet new challenges and realities as they evolve.

### Competencies

1. Describe the core functions, values, and principles of global health and sustainable development.
2. Identify and characterize social, economic, and environmental factors that determine global health and sustainable development.
3. Select and apply appropriate frameworks to analyze relationships among the different components of ecosystems and society.

4. Identify and evaluate current and emerging societal, economic, and climatic issues and regulatory frameworks that may affect the emergence of novel pathogens.
5. Assess and apply best practices to prevent, control or attenuate epidemics and pandemics.
6. Cultivate effective communication with diverse stakeholders on global and environmental health issues.
7. Identify and recommend strategies to satisfy the needs for public health and well-being of present and future equitably.

Updated: April 2023

## Master of Science in Product Stewardship

This exciting new master's degree is the first of its kind in the world: it is the only academic degree available today designed to prepare students for leadership roles in the emerging field of product stewardship. Based in the IU Richard M. Fairbanks School of Public Health's Environmental Health Science department, the 30-credit degree can be completed as a part-time or full-time student. Students will take six credits of public health fundamentals, nine credits of environmental health science fundamentals and 15 credits of specialized product stewardship coursework that is taught by industry experts who helped invent the field. Classes are delivered online, in real time, as distance education courses.

In a world of rapidly evolving consumer values, society is demanding that products are not only high quality, but environmentally sustainable, safe, and healthy for workers and consumers, and socially responsible. Product stewardship is the "responsible management of the health, safety, and environmental aspects of raw materials, intermediate, and consumer products throughout their life cycle and across the value chain in order to prevent or minimize negative impacts and maximize value." It is an emerging and evolving profession which addresses local, national, and global issues related to the environment, worker health and safety, and social accountability as they relate to the design, use and disposal of everyday products. The product stewardship profession is growing and evolving to meet this societal demand.

The Indiana University Richard M. Fairbanks School of Public Health's strong ties with industry, including adjunct faculty who are active in the product stewardship field, assures that students will receive content and skills that are aligned with specific needs of the workforce.

### Who Will Benefit from This Degree?

The MS in Product Stewardship is designed for those who would like to advance their careers by meeting the ever-growing demand for product stewardship professionals. Competitive candidates include:

- Working professionals who are already active in the product stewardship field, who seek the formal training that will allow them to move up in their product stewardship organizations.
- Working professionals from a wide range of other backgrounds, including environmental health, regulatory compliance, industrial hygiene,

occupational health and safety, sustainability, product development, supply chain, and law.

- Current undergraduates who want to pursue a graduate degree in order to fast-track their careers.

Successful applicants will have strong academic records and proven skills in science and analytical thinking.

### A Focus on Meeting Industry Need

The Fairbanks School of Public Health has worked with product stewardship leaders at top companies around the world to develop a curriculum that meets the industry's need for well-trained product stewardship professionals. Specialized product stewardship courses will include:

- Fundamentals of Product Stewardship
- Product Hazard, Exposure and Risk Assessment
- Regulatory Affairs for Product Stewardship
- Product Improvement and Sustainability
- Product Stewardship Strategy and Management

### MS in Product Stewardship Curriculum

The Master of Science in Product Stewardship is an entirely online and interactive, 30 credit distance education program which includes public health fundamentals, environmental health science fundamentals, and specialized product stewardship coursework. All courses are required and a minimum GPA of 3.0 is mandatory to remain in good academic standing and graduate. Although classes will be recorded, regular attendance of all online classes is expected. Applicants are allowed to enroll in the MS as a full-time or part-time student and complete the degree within five years.

### Product Stewardship Core Courses

*Take all five courses for 15 credits*

- A680 Fundamentals of Product Stewardship (3 credits)
- A678 Product Improvement & Sustainability (3 credits)
- A677 Product Hazard, Exposure & Risk Assessment (3 credits)
- A675 Regulatory Affairs for Product Stewardship (3 credits)
- A676 Product Stewardship Strategy & Management (3 credits)

### Public Health Courses

*Take both courses for six credits*

- P510 Introduction to Public Health (3 credits)
- Public Health Elective (3 credits)

### Environmental Health Science Courses

*Take all three courses for nine credits*

- A661 Fundamentals of Toxicology (3 credits)
- A662 Human Health Risk Assessment (3 credits)
- A623 Management & Leadership in Health Protection (3 credits)

## Product Stewardship Program Competencies

The goal of the MS Program in Product Stewardship coincides with IUPUI's Principles of Graduate and Professional Learning. Students will master the knowledge and skills set forth in the Product Stewardship Program Competencies, be able to communicate effectively with peers, clientele, and the public, think creatively and critically to improve practice in the field of product stewardship, and behave in an ethical manner both professionally and personally. The specific competencies for the MS in Product Stewardship are as follows:

- Describe the core functions, values, and principles of environmental and occupational public health.
- Identify and characterize product hazards, exposures, and risk through inherent product characteristics, uses, and misuses of products.
- Select and apply appropriate frameworks to analyze product risks to humans and the environment throughout product supply chains and product lifecycles.
- Identify and evaluate current and emerging societal issues, regulatory requirements, and voluntary frameworks that may affect products throughout their lifecycle.
- Assess and apply best practices to improve product sustainability and competitive advantage while minimizing business risk through management and product development.
- Identify and recommend strategies to improve the capabilities of product stewardship organizations within the larger business construct.

## Master of Science in Product Stewardship Admission

Application, admission, and degree-granting requirements and regulations shall be applied equitably to all individuals, applicants, and students regardless of age, gender, race, disability, sexual orientation, religion, or national origin.

All applicants must have a bachelor's degree from an accredited university or college and have an acceptable academic record. There are no mandatory pre-requisites for admission to the MS program; however, previous exposure to physical or life sciences is helpful. If applicants are concerned about being adequately prepared, please contact Sue Hancock, [suehanco@iu.edu](mailto:suehanco@iu.edu).

The Product Stewardship MS is officially an academic plan under the Public Health academic program.

Fall Application Deadlines:

- US Application Deadline: August 1
- International Application Deadline: July 1

Applicants must meet the following criteria:

### Admission Criteria

- Baccalaureate degree from an accredited university or college with a minimum of 3.0 GPA.
- Competent written and oral communication skills.
- Transcripts from all colleges and universities attended (except Indiana University).

### Admission Requirements

1. Personal Statement
2. Resume
3. Transcripts
4. Recommendations

## International Applicants

### Test of English as a Foreign Language (TOEFL)

Test of English as a Foreign Language (TOEFL) The Indiana University Fairbanks School of Public Health requires applicants whose native language is not English or whose academic study was done exclusively at non-English speaking institutions to prove English proficiency by providing either official Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores. Scores must be under two years old.

Applicants who reside in the U.S. at the time of application must submit TOEFL, IELTS or IUPUI EAP (English for Academic Purposes) exam scores.

Applicants who are admitted with TOEFL score of 100 and IELTS score of 7.5 will not require any additional English test or courses.

Applicants who are admitted and do not meet TOEFL score of 100 or IELTS score of 7.5, must also enroll and successfully complete ENG-G 513 Academic Writing Grad Students through IUPUI during Summer Session II. This course is completely online and designed to meet the academic writing needs of ESL graduate students.

The USMLE and ECFMG do not fulfill the required proof of English proficiency when applying to this program. Applicants who have passed the USMLE or ECFMG must also submit TOEFL, IELTS or EAP Scores.

Applicants must submit:

- TOEFL scores to IUPUI School Code 1325
- IELTS scores can be uploaded to IUPUI application

### English Placement Test

International applicants who reside in the U.S. at the time of application must submit TOEFL, IELTS or IUPUI EAP (English for Academic Purposes) exam scores.

International applicants who do not reside in the U.S. at the time of application must submit their TOEFL or IELTS scores with their application and, if admitted to the MSPS Program, must also enroll and successfully complete ENG-G 513 Academic Writing Grad Students through IUPUI during Summer Session II. This course is completely online and designed to meet the academic writing needs of ESL graduate students.

The USMLE and ECFMG do not fulfill the required proof of English proficiency when applying to the MSPS Program. Applicants who have passed the USMLE or ECFMG must also submit TOEFL, IELTS or EAP Scores.

Updated April 12, 2022

## MPH-MA

### Master of Public Health - Master of Arts in Bioethics Dual Degree

The many advances in health sciences have resulted in new, complex ethical considerations for individuals, health care professionals, institutions, and other relevant decision makers. Professionals in public health, prevention sciences, health sciences, the life sciences, and the social sciences have relied on the field of bioethics when dealing with controversial issues related to (1) individual vs. community rights, (2) analysis of benefits, harms, risks, and costs, and (3) ethical issues in global health research.

Students will learn about ethical issues in population health practice, research, and policy. For example, they will examine questions related to individual and community responsibilities during infectious disease outbreaks and man-made or natural disasters. They will consider the ethical implications of various public health practices related to human rights, domestic and international research, resource allocations, security, and genetic/health screenings, as well as other relevant areas.

Through the dual degree program, the two degrees can be obtained with a total of 60 earned credits, as compared with the 75 credits required if the degrees are obtained separately.

Students will complete the Bioethics MA curriculum and the MPH curriculum except that students in the combined program will be allowed to double-count courses as follows:

- H602: Public Health Internship (3 credits) will count toward both degrees, replacing PHIL P548: Clinical Ethics Practicum (3 credits) in the bioethics curriculum.
- Students must complete a capstone research project by receiving three credits under H705 and three credits under PHIL P803. These six credits will be counted toward both degrees. They will count as electives in the MPH curriculum, and as concentration-specific electives in the Bioethics MA curriculum.
- Students will also be allowed to select up to six credits of the following electives from either the Bioethics MA or the MPH curricula (no more than three credits from each). These six credits will be counted toward both degrees. They will count as electives in the MPH curriculum, and as concentration-specific electives in the Bioethics MA curriculum.

#### MPH curriculum

##### Public health core courses

Take all four courses for a total of 12 credits

- PBHL P510 Introduction to Public Health (3 credits)
- PBHL P511 Comprehensive Methods and Applications in Biostatistics and Epidemiology (3 credits)
- PBHL P513 Planning, Evaluation & Management (3 credits)
- PBHL P512 Communication & Leadership (3 credits)

##### Health policy and management concentration courses

Take all six courses for a total of 18 credits

- H611 Policy Design, Implementation & Management (3 credits)
- H616 Leading Public Health Service Organizations (3 credits)
- H619 Financial Management for Public Health Organizations (3 credits)
- H628 Healthcare Information Systems (3 credits)
- H641 Public Health Ethics (3 credits)
- H658 Health Policy and Program Evaluation (3 credits)

##### Public health elective courses

Select three credits from list below

- H621 Grant Writing and Administration for Public Health (3 credits)
- H613 Emergency Preparedness for Public Health (3 credits)
- H644 Health Impact Assessment (3 credits)
- H624 Developing Strategic Capabilities (3 credits)
- H657 Cost-Effectiveness (3 credits)
- H639 Law, Poverty and Population Health (3 credits)
- H621 Grant Writing and Administration for Public Health (3 credits)
- S614 Program Planning and Evaluation (3 credits)
- E601 Advanced Epidemiology (3 credits)
- A640 Public Health Applications of GIS (3 credits)

##### Public health practical experience

Take both courses for a total of six credits

- H602 Public Health Internship (3 credits)
- H711 Capstone Experience in Health Policy and Management (3 credits)

Updated: April 2023

## Master of Public Health- Biostatistics

The Indiana University MPH Program is a unique program which can be completed on a part-time basis in three years, or on a full-time basis in two years. Most of the required MPH courses are offered in the evening to allow working professionals the opportunity to continue their education. Through case studies, group and individual projects, and internships, students will explore public health problems and issues, learn how to think critically and work in teams. Courses are taught by scholars and practitioners drawn from many disciplines and perspectives.

The MPH Program at IU School of Public Health is fully accredited by the Council on Education for Public Health.

### MPH-Biostatistics

The 45-credit MPH degree with a concentration in Biostatistics provides a comprehensive foundation in public health, with an emphasis on using biostatistics to understand and solve public health challenges. This option is the best fit for students who plan to seek employment in the public health field, as well as those pursuing an MPH in another concentration and those with a terminal degree,

such as an MD or PhD, in a related field who wish to add additional quantitative abilities to their skill set. MPH students take a combination of public health core courses, public health concentration courses, public health elective courses, a practical experience course and a capstone course.

## Curriculum

All MPH candidates must satisfactorily complete a minimum of 45 credits. For those pursuing the Biostatistics concentration, the curriculum includes required core courses, Biostatistics courses, and elective courses. In addition, each student must complete an internship and a final concentration project.

### Public Health Core Courses

*Take all four courses for a total of 12 credits*

- PBHL P510 Introduction to Public Health (3 credits)
- PBHL P511 Comprehensive Methods and Applications in Biostatistics and Epidemiology (3 credits)
- PBHL P513 Planning, Evaluation & Management (3 credits)
- PBHL P512 Communication & Leadership (3 credits)

### Biostatistics Concentration Courses

*Take all five courses for a total of 18 credits*

- B562 Biostatistics II for Public Health (3 credits)
- B571 Biostatistics Method I – Linear Model in Public Health (4 credits)
- B572 Biostatistics Method II – Categorical Data Analysis (4 credits)
- B573 Biostatistics Methods II – Applied Survival Data Analysis (4 credits)
- B574 Biostatistics Method IV – Applied Longitudinal Data Analysis (3 credits)

*Take one of the following courses for a total of 3 credits*

- B581 Introduction to computing (3 credits)
- B552 Fundamentals of Data Management (3 credits)

### Public Health Electives Courses

*Select two courses for a total of 6 credits*

- B552 Fundamentals of Data Management (3 credits)
- B581 Introduction to Computing (3 credits)
- B582 Introduction to Clinical Trials (3 credits)
- INFO H515 Data analytics (3 credits)
- E645 Information Exchange for Population Health (3 credits)
- E653 Meta-Analysis (3 credits)

### Public Health Practical Experience

*Take both courses for a total of 6 credits*

- B602 MPH Internship in Biostatistics (3 credits)
- B701 Final Project: Integrated Learning Experience (ILE) in Biostatistics (3 credits)

## Certified Public Health Exam

MPH students entering the program fall 2020 and beyond are required to pass the CPH exam prior to graduation. More information on this requirement can be found at <https://fsph.iupui.edu/academics/certifications.html>

## Competencies

- Use biostatistical methods to analyze and report public health data.
- Specify approaches to assess, prevent and control environmental and occupational hazards to human health and safety.
- Use epidemiologic methods to collect, study, analyze and report the patterns of disease in human populations for diverse audiences.
- Identify and analyze the components and issues of leadership, including financing and delivery of public health services and systems.
- Apply policy process, development and analysis methods to address current national, state and local public health issues.
- Identify social and behavioral science factors, theories and models and develop, implement and evaluate interventions designed to positively affect health behaviors in populations.
- Collect and disseminate public health data through the use of technology and media.
- Explain how human biology influences health and public health practice.
- Exhibit high standards of personal and organizational integrity, compassion, honesty and respect for all people.
- 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.
- Demonstrate the impact of diversity and culture on public health across discipline areas
- Demonstrate an understanding of the basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of public health data.

## Admissions

Students may start the MPH program in either the Fall or Spring semester. The application deadlines are:

### To Begin in The Fall

- U.S Application Deadline: July 1
- International Application Deadline: April 1

### To Begin in The Spring

- U.S Application Deadline: November 1
- International Application Deadline: September 15

For detailed admissions criteria and instructions for applying to the Master of Public Health degree, click a button below.

## Master of Public Health Applicants

Application, admission, and degree-granting requirements and regulations shall be applied equitably to all individuals,

applicants, and students regardless of age, gender, race, disability, sexual orientation, religion, or national origin.

### Admission Criteria

- Baccalaureate degree from an accredited university or college.
- Official GRE scores, if cumulative undergraduate GPA from all universities attended is below 3.0.
- Minimum of one year of undergraduate mathematics (e.g., algebra, statistics, or finite math).
- Competent written and oral communication skills.
- Students meeting these requirements are not guaranteed admission. Other admission factors include references, work experience, the personal statement, and personal interview (if applicable).

MPH applications and supplemental materials must be submitted to SOPHAS (Schools of Public Health Application Service). SOPHAS is meant to facilitate the collection of common application materials and general information. For more information and frequently asked questions please visit [sophas.org](https://sophas.org). In addition to the SOPHAS application all applicants will be required to complete a short application to the IUPUI (Indiana University-Purdue University Indianapolis) Online Graduate and Professional Admissions Application system at the link provided within the SOPHAS application or by clicking below.

### Admission Requirements

1. Personal Statement
2. Resume
3. Transcripts
4. Recommendations
5. Graduate Record Examination (GRE)

### Graduate Record Examination (GRE)

Applicants who have earned a cumulative undergraduate GPA of below a 3.0 are required to submit official scores from the GRE taken within the past 5 years. International applicants whose undergraduate work was completed at institutions outside of the U.S. or Canada are required to submit scores from the GRE regardless of cumulative GPA. The cumulative undergraduate GPA is calculated using all undergraduate grades earned from all colleges and universities attended. The GRE is not required of applicants who have a graduate or professional degree from a U.S. or Canadian college or university. The following exams can be substituted for the GRE: DAT, ECFMG, LSAT, OAT, GMAT, MCAT, or USMLE (steps one and two).

For detailed information on the GRE score reporting system please visit [ets.org/gre](https://ets.org/gre).

Applicants must submit GRE or substituted scores to SOPHAS using the following designation DI Code 0167.

### International Applicants

Test of English as a Foreign Language (TOEFL)

The Indiana University Fairbanks School of Public Health requires applicants whose native language is not English or whose academic study was done exclusively at non-English speaking institutions to prove English proficiency

by providing either official Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores. Scores must be under two years old.

Updated April 12, 2022

## MD-Certificate Graduate Certificate in Public Health - Doctor of Medicine

Students admitted to the Indiana University School of Medicine, at any of the nine IUSM campuses, are eligible to apply to the Public Health Certificate-MD program at the IU Richard M. Fairbanks School of Public Health at IUPUI.

This combination will prepare you to balance your career between direct medical care of individuals and public health practice within communities. It will also expand your career options by making you more marketable for a wide variety of careers (i.e. global health, hospital leadership, health policy, health research, nonprofit management, environmental health, and refugee and immigrant health).

The Public Health Certificate-MD (15 credits) includes five core public health courses. These courses are typically completed online during the summer after the first year of medical school; however, they can be taken at other times as well.

### Graduate Certificate in Public Health Graduate Certificate in Public Health curriculum

*Take any five of the course selections below for 15 hours*

- P510 Introduction to Public Health
- P501 Social and Behavioral Science in Public Health
- P504 U.S. Healthcare Systems & Health Policy
- P517 Fundamentals of Epidemiology
- P519 Environmental Science in Public Health
- P551 Biostatistics for Public Health

### Curriculum prior to fall 2023

*Take all five course for 15 hours*

- PBHL P510 Introduction to Public Health (3 credits)
- PBHL P511 Comprehensive Methods and Applications in Biostatistics and Epidemiology (3 credits)
- PBHL P512 Communication & Leadership (3 credits)
- PBHL P513 Planning, Evaluation & Management (3 credits)
- One public health elective (3 credits)

### Competencies

By completing the Graduate Certificate in Public Health, you will learn how to:

- Use biostatistical methods to analyze and report public health data
- Specify approaches to assess, prevent, and control environmental and occupational hazards to human health and safety
- Use epidemiologic methods to collect, study, analyze and report the patterns of disease in human populations for diverse audiences

- Apply policy process, development, and analysis methods to address current national, state, and local public health issues
- Identify social and behavioral science factors, theories and models and develop, implement, and evaluate interventions designed to positively affect health behaviors in populations
- Exhibit high standards of personal and organizational integrity, compassion, honesty, and respect for all people
- Identify the impact of diversity and culture on public health across discipline areas
- Identify the basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of public health data

### Certificate requirements

To earn the Graduate Certificate in Public Health, students must complete coursework in the five core areas of public health and maintain a minimum cumulative grade point average of 3.0 ("B" grade on a 4.0 scale). All public health courses require authorization before registering. Please call (317) 278-0337 to obtain authorization.

Updated: April 2023

## Master of Public Health - Interdisciplinary Public Health Studies

The Master of Public Health in Interdisciplinary Public Health Studies (IPHS) provides you with a broad foundation to tackle the complex problems facing us today. This multidisciplinary concentration allows you to deepen your public health experience to align with your career goals.

You will graduate with a well-rounded educational experience that equips you with the skills to become a public health professional ready to spark change in Indiana and beyond.

### Interdisciplinary Public Health Studies curriculum online and in-person

The MPH-IPHS offers the flexibility you need to complete your degree. You have the option of pursuing an in-person/hybrid experience, traditional 16-week semesters online, or accelerated 8-week semesters online.

After completing the core public health courses, you will take courses from a variety of public health specialties and complete an internship and capstone experience.

The in-person/hybrid and traditional online (16-week long semesters) experiences allow you to customize your program of study to enhance your research or practice interests.

With the accelerated online experience (8-week long semesters) you have the option to complete your studies in as little as 15 months.

### Master of Public Health core courses

Take all six courses for a total of 18 credits

- P510 Introduction to Public Health
- P500 Social and Behavioral Science in Public Health

- P551 Biostatistics for Public Health
- P519 Env't Science in Public Health
- P517 Fundamentals of Epidemiology
- P504 U.S. Healthcare Sys. & Health Policy

### Public health interdisciplinary concentration courses

Choose any four of the following 3-credit hour concentration courses for a total of 12 credits

- E601 Advanced Epidemiology
- E635 Foundations of Public Health Informatics
- E711 Applied Epidemiological Methods
- E715 Observational Studies
- H611 Policy Design, Implementation & Management
- H619 Financial Management for Public Health Organizations
- H624 Developing Strategic Capabilities
- H628 Health Info Systems
- S617 Health Promotion & Disease Prevention
- S619 Health Disparities & Health Equity
- S662 Advanced Program Planning
- S664 Research Methods and Program Evaluation

### Public health interdisciplinary elective courses

Choose any three of the following 3-credit hour elective courses or from the concentration course offerings for a total of 9 credit hours

- A641 Global Health & Sustainable Development
- A643 Water & Sanitation
- A644 Sustainable Production & Consumption
- A646 Restoration of the Land & Sea
- B552 Fundamentals of Data Management
- B581 Introduction to Computing
- B582 Introduction to Clinical Trials
- E606 Grant Writing
- E609 Infectious Disease Epidemiology
- E618 Global Cancer Epidemiology
- E645 Information Exchange for Population Health
- E666 Overview of Precision Health
- H531 Pop. Health and Value-based Care
- H613 Emergency Preparedness
- H658 Research Concepts in Health Policy & Management
- S620 Stress and Population Health: A biopsychosocial exploration
- S625 Applied Public Health Campaigns
- S630 Global Maternal and Child Health

### Public Health practical experience

Take both courses for a total of 6 credits

- P602 Public Health Internship
- P705 MPH Capstone Experience

### Competencies

1. Utilize basic quantitative and qualitative research designs used in public health and apply epidemiological measures and methods in a population.
2. Analyze the interdisciplinary roles, relationships, and resources of the entities influencing public health.

3. Apply diversity, equity, and inclusion approaches in public health research and practice.
4. Determine appropriate use of data and statistical methods and informatics for problem identification and resolution, and program planning.
5. Evaluate public health research, summarize current knowledge, interpret the implications for public health policies and programs, and make recommendations for improvement.

## Admission criteria and requirements

### Criteria

- Baccalaureate degree from an accredited university or college.
- Minimum of one year of undergraduate mathematics (e.g. algebra, statistics, or finite math).
- Competent written and oral communication skills.
- Students meeting these requirements are not guaranteed admission. Other admission factors include references, work experience, the personal statement, and personal interview (if applicable).

MPH applications and supplemental materials must be submitted to SOPHAS (Schools of Public Health Application Service). SOPHAS is meant to facilitate the collection of common application materials and general information. For more information and frequently asked questions please visit [sophas.org](http://sophas.org).

### Graduate Record Examination (GRE)

GRE scores are not required for admission. To strengthen the application, GRE scores are strongly recommended if the cumulative GPA from all undergraduate institutions attended is below 3.0. Official GRE test scores taken within the past five years are acceptable.

### Personal statement

The personal statement should contain only responses to the following five questions. Students must upload their responses to the Personal Statement section of SOPHAS.

Please answer each of the following five questions in a concise and well-written short answer format. Responses to each question should not exceed 100 words (500 words total for all five questions).

- Where did your interest in public health originate?
- Why are you interested in the Fairbanks School of Public Health?
- Which MPH concentrations are you pursuing and why?
- What do you think you might be doing professionally five years from now? Please list two possibilities.
- What do you think are the most pressing public health issues at this time?

### Résumé

For each position on the résumé or CV, provide the job title, employing agency, dates employed, and responsibilities held. Indicate any additional strengths or skills such as fluency in foreign languages, research experience, teaching experience, community service, and demonstration of leadership skills. Include professional certifications, honors, and awards.

Your résumé or CV can be uploaded electronically into SOPHAS and should not be mailed.

### Transcript

#### U.S. or Canadian transcripts

Official post-secondary transcripts from all U.S. institutions attended (must be sent directly from the institutions to SOPHAS). This includes previous study at Indiana University campuses. U.S. applicants who studied at foreign institutions as part of a study abroad experience at their U.S. college or university do not need to provide a WES evaluation of their study abroad coursework.

Applicants are required to enter all U.S. coursework. Entering U.S. coursework allows SOPHAS to calculate GPAs that institutions use in reviewing applications, provides a way for institutions to review applications using electronic review forms and also allows for a mechanism to gather aggregate information about prior coursework. SOPHAS uses official transcripts to verify the self-reported coursework. This process significantly expedites the institution review process.

For regular mail, please send your transcript to:

SOPHAS  
P.O. Box 9111  
Watertown, MA 02471-9111

#### For overnight delivery only:

SOPHAS  
c/o Liaison International  
311 Arsenal Street  
Watertown, MA 02472  
Phone: 617-612-2090

Applicants who have not earned a degree at the time of application submission will be required to submit an official transcript upon acceptance to the IU Fairbanks School of Public Health. This official transcript should indicate your degree earned and date of conferral. If you did not earn your degree at the time you applied to SOPHAS, please send an updated official transcript with degree earned and date of conferral to:

IU Fairbanks School of Public Health  
Office of Student Services and Admissions  
Attn: Cher Percy  
1050 Wishard Blvd., 5th Floor  
Indianapolis, IN 46202

### Foreign transcripts

All applicants with foreign academic credentials must provide a World Education Services (WES) ICAP course-by-course evaluation of those credentials. Because this process can take some time, applicants should submit their transcripts to WES at least one month in advance of the application deadline.

Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure electronic transmission. This expedites the delivery of the evaluation report as well as images of the applicant's verified transcripts to SOPHAS and allows SOPHAS to process the report most efficiently.



## Letters of recommendation

Three letters of recommendation are required from academic/professional sources that can provide an unbiased critical assessment of your abilities, skills, strengths, and weaknesses. Examples of academic/professional sources are professors, academic advisors, internship preceptors, or immediate supervisors. Examples of sources that are not acceptable include coworkers, colleagues, teaching assistants, classmates, ministers, and relatives.

Recommendation letters must be submitted electronically to SOPHAS.

## Interview

Interviewees are invited at the discretion of the admission committee.

The MPH admissions committee conducts interviews using Skype video conferencing for applicants who are unable to travel to Indianapolis for the interview. Skype is a free software application that allows users to connect through the internet to communicate. Note that applicants will need access to a webcam and microphone for the interview.

## International applicants

### Test of English as a Foreign Language (TOEFL)

The Indiana University Fairbanks School of Public Health requires applicants whose native language is not English or whose academic study was done exclusively at non-English speaking institutions to prove English proficiency by providing either official Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores. Scores must be under two years old.

The preferred minimum English language test scores for admission to the Fairbanks School of Public Health are:

- Internet-based TOEFL: minimum score of 92
- Computer-based TOEFL: minimum score of 263
- Paper-based TOEFL: minimum score of 620
- IELTS (total band score): minimum score of 7

Applicants must submit:

- [TOEFL](#) scores to SOPHAS using the following designation DI Code 5688.
- [IELTS](#) scores must be uploaded electronically to SOPHAS.

### English Placement Test

- International applicants who reside in the U.S. at the time of application must submit TOEFL, IELTS or IUPUI EAP (English for Academic Purposes) exam scores.
- International applicants who do not reside in the U.S. at the time of application must submit their TOEFL or IELTS scores with their application and, if admitted to the MPH program, also complete an EAP Exam upon arrival to Indianapolis.
- The USMLE and ECFMG do not fulfill the required proof of English proficiency when applying to the MPH program. Applicants who have passed the

USMLE or ECFMG must also submit TOEFL, IELTS or EAP scores.

To schedule a test date and time please call the testing center at 317-274-2620.

## WES evaluations of transcripts

### Foreign transcripts

All applicants with foreign academic credentials must provide a World Education Services (WES) ICAP course-by-course evaluation of those credentials. Because this process can take some time, applicants should submit their transcripts to WES at least one month in advance of the application deadline.

Through special arrangements with SOPHAS, WES will deliver its credential evaluation report directly to SOPHAS by secure electronic transmission. This expedites the delivery of the evaluation report as well as images of the applicant's verified transcripts to SOPHAS and allows SOPHAS to process the report most efficiently.

### [See more information on WES](#)

DO NOT mail any other documents to SOPHAS, including thesis, dissertations, or pre-secondary or secondary transcripts.

International applicants will be required to submit official transcripts, marksheets and diplomas from all colleges and universities attended to the IUPUI Office of International Affairs (OIA). OIA will evaluate your transcripts to determine if eligibility requirements for graduate study have been met.

Please mail transcripts, marksheets and diploma to:

Office of International Affairs  
Indiana University-Purdue University in Indianapolis  
902 W. New York Street, ES2126  
Indianapolis, IN 46202

Office: (317) 274-7000  
Fax: (317) 274-2213  
Email: [intlaff@iupui.edu](mailto:intlaff@iupui.edu)  
Web: [international.iupui.edu](http://international.iupui.edu)

Updated: April 2023

## Accreditations

The IU Richard M. Fairbanks School of Public Health at IUPUI has achieved a global milestone: becoming the first US school of public health to receive full accreditation from the Agency for Public Health Education Accreditation (APHEA), an independent, international accrediting body based in Europe.

"As home to the first school of public health in the United States with international APHEA accreditation, IUPUI continues to strengthen our reputation as a global leader in education and research," said Nasser H. Paydar, former chancellor of IUPUI. "This honor highlights our ongoing commitment to preparing our students to succeed as global citizens and supporting students who join us from around the world."

The IU Richard M. Fairbanks School of Public Health is proud to be fully accredited by the Council on Education for Public Health (CEPH). Accreditation is the culmination

of a rigorous multi-year process involving an extensive self-study and a site visit by an accreditation team.

The MHA program is accredited by the Commission on Accreditation Healthcare Management Education.

The Global Health Protection major of the BSPH is accredited by the Environmental Health Science and Protection Accreditation Council.

Learn more about our [accreditation on our website](#).

Updated: April 2023

## Certificate Programs

Whether you want to become a more competitive candidate for your dream job or gain additional expertise, a certificate at the Fairbanks School of Public Health will meet the needs of working professionals or pre-career students.

### Graduate Certificate in Health Policy

The IU Richard M. Fairbanks School of Public Health Graduate Certificate in Health Policy is a 15-credit hour program of study designed to meet the needs of working public health professionals who wish to advance their careers by continuing their education.

Completing the certificate will provide you with an introduction to health policy that will incorporate the rapid changes occurring in health care, complex ethical issues, and complicated financing systems.

Courses are taught by faculty from the IU Richard M. Fairbanks School of Public Health, as well as the IU Schools of Medicine, Law, Nursing, Public and Environmental Affairs, and Liberal Arts. Graduates who are later accepted into the Fairbanks School of Public Health Master of Health Administration (MHA) degree may be able to apply credits earned in the Graduate Certificate in Health Policy toward the MHA degree, if they do so within 24 months of completing the graduate certificate, making this a great choice for those considering pursuing a graduate degree in the future.

#### Certificate requirements

To earn the Graduate Certificate in Health Policy, students must complete 15 credit hours of courses, which includes nine credit hours of required courses and six credit hours of approved electives. Students must maintain a minimum cumulative grade point average of 3.0 ("B" grade on a 4.0 scale). Students who are already enrolled in the MHA degree program are not eligible for admission to the graduate certificate program. All public health courses require authorization before registering. Please call (317) 274-2000 to obtain authorization.

#### Curriculum

##### Required courses

*Take three courses for a total of 9 credits*

- PBHL H501 U.S. Healthcare and Health Policy (3 credits)
- PBHL H611 Advanced Policy Implementation Seminar (3 credits)

- PBHL H616 Leading Public Health Organizations (3 credits)

##### Elective courses

*Take two courses for a total of 6 credits*

- PBHL H613 Emergency Preparedness for Public Health (3 credits)
- PBHL H619 Financial Management and Public Health Organizations (3 credits)
- PBHL H621 Grant Proposal Writing and Administration (3 credits)
- PBHL H624 Developing Strategic Capabilities (3 credits)
- PBHL H628 Healthcare Information Systems (3 credits)
- PBHL H641 Public Health Ethics (3 credits)
- PBHL H644 Health Impact Assessment (3 credits)
- PBHL H657 Application of Cost Effectiveness for Public Health (3 credits)

##### Competencies

- Develop positions on health issues, law, and policy
- Educate policy and decision makers to improve health, social injustice, and equity
- Assess positions of key stakeholders for health policies, programs, and resources
- Implement federal, state, or local regulatory programs and guidelines

### Graduate Certificate in Health Systems Management

The IU Richard M. Fairbanks School of Public Health Graduate Certificate in Health Systems Management is a 15-credit hour program of study designed to meet the needs of working health care administrators and physicians who are actively engaged in managerial duties, as well as physicians and health care professionals who wish to advance their careers by continuing their education.

Completing this certificate will provide greater knowledge of the structure, processes, and goal-setting approaches of health care organizations and enhance understanding of the environment in which they currently operate.

Graduates who are later accepted into the Fairbanks School of Public Health Master of Health Administration (MHA) degree may be able to apply credits earned in the Graduate Certificate in Health Systems Management toward the MHA degree, if they do so within 24 months of completing the graduate certificate, making this a great choice for those considering pursuing a graduate degree in the future.

#### Certificate requirements

To earn the Graduate Certificate in Health Systems Management, students must complete 15 credit hours of approved courses, which includes nine credit hours of required courses and six credit hours of approved electives. Students must maintain a minimum cumulative grade point average of 3.0 ("B" grade on a 4.0 scale). Students who are already enrolled in the MHA degree

program are not eligible for admission to the graduate certificate program. All public health courses require authorization before registering. Please call (317) 274-2000 to obtain authorization.

## Curriculum

### Required courses

- PBHL H501 U.S. Health Care: Systems, Policies and Ethical Challenges (3 credits)
- PBHL H508 Managing Health Care Accounting Information for Decision-Making (3 credits)
- PBHL H523 Health Services Human Resources Management (3 credits)

### Elective courses

Take two approved courses for a total of 6 credits

Transfer credit, course substitutions and course waivers are not permitted.

### Competencies

Upon completion of the Graduate Certificate in Health Systems Management, students will demonstrate the competencies in the areas of leadership, budgeting and finance, human resources management and health services administration as outlined below:

1. Develop leadership approaches that are effective for communicating a vision, motivating stakeholders, building consensus, and leading organizational change.
2. Work cooperatively with others; create, contribute to, and lead teams.
3. Use quantitative information for effective organizational decision-making.
4. Use financial skills for effective stewardship of resources.
5. Understand and appropriately use information technology to support business and clinical functions.
6. Apply appropriate management approaches to management and business decisions within healthcare organizations.
7. Describe reimbursement methods and payer types.
8. Understand the fundamental principles of human resources management and appropriately apply these principles to support business and clinical functions.
9. Understand and describe the history & evolution of various health care organizations in the United States.
10. Understand and describe the functions of operational components within health care organizations in the United States.

## Graduate Certificate in Infection Control and Prevention Epidemiology

The IU Richard M. Fairbanks School of Public Health Graduate Certificate in Infection Control and Prevention Epidemiology is a 100 percent online, 15-credit hour program of study designed for working professionals who are interested in epidemiologic principles related

to infectious diseases and practices used to improve population and patient health.

As a student in this program, you learn to recognize public health problems and collaborate with others to address them. You learn how to conduct an epidemiological investigation, from creating hypotheses to working with data and software. You master the basic and advanced analytical techniques necessary in the field of epidemiology.

This program may be of interest if you plan on working in public health, becoming an epidemiologist, joining an infection control and prevention team at a hospital or health care setting, or pursuing graduate or professional education. All credits earned in this certificate program are transferable to the Master of Public Health.

### Competencies

By completing the Graduate Certificate in Infection Control and Prevention Epidemiology, you will learn how to:

- Recognize the existence of a public health problem
- Collaborate with others inside and outside the agency to identify the problem
- Identify surveillance data needs
- Assist in design of investigation, including creating hypothesis
- Demonstrate mastery of the basic and advanced analytical techniques in epidemiology
- Demonstrate basic data management and analysis skills using statistical software such as SAS by translating raw epidemiologic data into actionable public health information
- Use a data set to examine disease testing patterns as well as prevalence of disease. Students must query the data from a database and then conduct an analysis
- Exhibit knowledge of applied epidemiology in relation to infectious diseases

### Certificate requirements

To earn the Graduate Certificate in Infection Control and Prevention Epidemiology, students must complete coursework in the five core areas of public health and maintain a minimum cumulative grade point average of 3.0 ("B" grade on a 4.0 scale). All public health courses require authorization before registering. Please call (317) 274-2000 to obtain authorization.

### Curriculum

#### Required introductory course (choose ONE course)

- E517 Fundamentals of Epidemiology (3 credits) **or**
- P511 Comprehensive Methods and Applications in Biostatistics and Epidemiology **or**
- B552 Fundamentals of Data Management (3 credits)

#### Required core courses (both must be completed)

- E635 Foundations in Public Health Informatics (3 credits) **and**
- E609 Infectious Disease Epidemiology (3 credits)

#### Electives (choose TWO courses)

- E601 Advanced Epidemiology (3 credits)

- E618 Cancer Epidemiology (3 credits)
- E629 Introduction to Genetic Epidemiology (3 credits)
- E645 Information Exchange for Population Health (3 credits)
- E651 Public Health Surveillance (3 credits)

## Graduate Certificate in Public Health

The IU Richard M. Fairbanks School of Public Health Graduate Certificate in Public Health is a 15-credit hour program of study designed to meet the needs of working public health professionals who wish to advance their careers by continuing their education.

Completing the certificate will provide you with a strong foundation in public health theory and concepts. Graduates who are later accepted into the Fairbanks School of Public Health Master of Public Health (MPH) degree may be able to apply credits earned in the Graduate Certificate in Public Health toward the MPH degree, if they do so within 24 months of completing the graduate certificate, making this a great choice for those considering pursuing a graduate degree in the future.

### Competencies

By completing the Graduate Certificate in Public Health, you will learn how to:

- Use biostatistical methods to analyze and report public health data
- Specify approaches to assess, prevent, and control environmental and occupational hazards to human health and safety
- Use epidemiologic methods to collect, study, analyze and report the patterns of disease in human populations for diverse audiences
- Apply policy process, development, and analysis methods to address current national, state, and local public health issues
- Identify social and behavioral science factors, theories and models and develop, implement, and evaluate interventions designed to positively affect health behaviors in populations
- Exhibit high standards of personal and organizational integrity, compassion, honesty, and respect for all people
- Identify the impact of diversity and culture on public health across discipline areas
- Identify the basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of public health data

### Certificate requirements

To earn the Graduate Certificate in Public Health, students must complete coursework in the core areas of public health and maintain a minimum cumulative grade point average of 3.0 ("B" grade on a 4.0 scale). All public health courses require authorization before registering. Please call 317-278-0337 to obtain authorization.

### Curriculum

- PBHL-P 510 Introduction to Public Health (3 credits)

- PBHL-P 511 Comprehensive Methods and Applications in Biostatistics and Epidemiology (3 credits)
- PBHL-P 512 Communication & Leadership (3 credits)
- PBHL-P 513 Planning, Evaluation & Management (3 credits)
- One public health elective (3 credits)

Updated: April 2023

## Contact Information

### Indiana University

Richard M. Fairbanks School of Public Health

Health Sciences Building (RG)1050 Wishard Boulevard,  
Floor 6 Indianapolis, IN 46202 Phone: (317) 274-2000  
Fax: (317) 274-3443

You may also contact the Fairbanks School of Public Health via email at [fsphinfo@iu.edu](mailto:fsphinfo@iu.edu).

## Graduate Programs

At the graduate level, students can pursue advanced study in public health through doctoral and master degrees, and certificates and minors.

### PhD Programs

The 90-credit PhD degrees in Biostatistics, Epidemiology, and Health Policy and Management can be completed on a part-time or full-time basis. [Learn more about our doctoral programs.](#)

The Fairbanks School of Public Health offers eight, 12-credit doctoral minors.

### DrPH Program in Global Health Leadership (DrPH)

The 45-credit hour DrPH program focuses on leadership skills through diverse experiences and exposure to a wide range of perspectives. Learning is achieved experientially, through highly interactive debates and discussions. Rich exchanges happen in real time, regardless of where in the world scholars are located. Unique advantages to the program include: global curriculum, global faculty, and global network.

### Master's Programs

The Fairbanks School of Public Health offers four master's degrees and multiple dual, joint, and coordinated curricula degrees.

The 45-credit Master of Public Health (MPH) degree offers five concentrations: Epidemiology, Health Policy and Management, Interdisciplinary Public Health Studies, Public Health Informatics, and Social and Behavioral Sciences.

The 51-credit Master of Health Administration (MHA) degree offers advanced study in health administration. The MHA program is accredited by the Commission on Accreditation of Healthcare Management Education (CAHME). The MHA program is also a member of the Association of University Programs in Health Administration.

The 36-credit Master of Science in Biostatistics (MS) provides a solid grounding in study design and data

collection, management, and analysis, as well as appropriate interpretation and communication of study findings. Graduates will have competencies in three areas: public health, biostatistics, and data management and computation.

The 30-credit Master of Science in Global Health and Sustainable Development (MS) prepares students with a broad, contemporary foundation of knowledge, skills, and abilities in global Health. This includes attention to public health across low, middle, and high income countries as well as the social, economic, political, and organizational conditions that comprise the environmental backdrop for health and well-being.

### Dual Degrees

The following degrees offer coordinated curricula on the IUPUI campus:

- MHA-MPH
- MHA-JD
- MPH-JD
- MPH-MD
- Certificate in Public Health-MD
- MPH-DDS
- MPH-MSW
- Certificate in Public Health-MS in Kinesiology
- MPH-MA in Bioethics

### Graduate Certificates

- Graduate Certificate in Health Policy (18 credits)
- Graduate Certificate in Health Systems Management (15 credits)
- Graduate Certificate in Public Health (15 credits)
- Graduate Certificate in Infection Control and Prevention Epidemiology (15 credits)

Updated: April 2023

## Faculty

You will have the opportunity to study with faculty across the school, learning from world-renowned researchers and practitioners, as you develop your expertise.

[See our faculty listing »](#)

## Undergraduate Courses

The abbreviation "P" refers to course prerequisites and "R" to recommended prerequisite courses. Prerequisites can be waived by the instructor of the course. The number of hours of credit is indicated in parentheses following the course title. Courses are listed in three groups: environmental health science, health services management, and public health.

### PBHL-A 115 WHATS IN YOUR BACKYARD?

**ENVIRONMENT AND HEALTH (3 cr.)** Environment where people live, work, play has a profound impact on human health and wellbeing. Through case-based learning, we will examine contemporary and emerging global environmental issues, their links to human health effects, and ways to solve these problems. We will explore future approaches to making environments sustainable and health-promoting.

### PBHL-A 120 Culture, Health and Happiness (3 cr.)

In the US we don't have one culture. We have regional

cultures which influence our environment and health. Students of all majors can learn about mortality patterns in different cultural regions of the country, and learn to use concept maps to understand cultural influences on those patterns in death.

### PBHL-A 130 Get Creative! Solving Global Health Challenges (3 cr.)

Novel solutions are needed to address disease- and non-disease challenges in global health. Learn how technical solutions can help overcome barriers to disease prevention, diagnosis and treatment, and how stakeholders can work together to align objectives and build capacity.

### PBHL-A 140 Preparing for Disasters (3 cr.)

Explore natural and environmental disasters we may face, steps for individual readiness to confront them, and social theories which underpin the steps. Students will learn disaster preparedness principles on the individual and community levels, and develop both a disaster plan and emergency supplies kit for themselves and their families.

### PBHL-A 215 Storytelling with Data (3 cr.)

Communicating data effectively to the public, policy makers, and media is essential to facilitate understanding, influence decision making and create change. Explore how to display and describe health and social science data. Bring data to life by choosing the best visual, the most impactful words, and the most strategic delivery.

### PBHL-A 310 Exposure Assessment Laboratory and Data Analysis (4 cr.)

This course will improve students understanding of principles in environmental exposure assessment through a two prong approach. Students will first learn to apply math and chemistry principles to environmental problems in small group learning activities. Laboratory experiments will then demonstrate exposure assessment techniques and allow student to evaluate health concerns.

### PBHL-A 316 Environmental Health Science (3 cr.)

The purpose of this course is to familiarize students with human / environment interaction and the potential impact of environmental hazards on human health and safety. This course focuses on the study of disease and injury-causing agents in the environment, where they come from, and their impact on human populations and communities. A variety of man-made and natural environmental agents will be studied. We will focus on biological, chemical, physical, and psychosocial agents and the illnesses and injuries produced by them. A variety of environmental control strategies, including technology, health promotion, and policy, will be examined throughout the course.

### PBHL-A 320 PREVENTION STRATEGIES TO IMPROVE POPULATION HEALTH (3 cr.)

Fundamentals of strategies to prevent injury and illness at the population level. We will explore the concepts of primary, secondary, and tertiary prevention with emphasis on regulatory, design, and clinical solutions.

### PBHL-A 325 HOW NOT TO GET KILLED: INJURY

**(3 cr.)** An examination of intentional and unintentional injury in our homes, on our streets, and in our workplaces. We will explore major injury classes, the impact on the public's health, identification of causal factors, and intervention strategies.

**PBHL-A 330 HUMANS IN EXTREME ENVIRONMENTS**

**(3 cr.)** Exploration of human performance, resilience, and adaptation to extreme environmental conditions, with emphasis pertaining to the occupational environment. We will examine physiological response and other human factors in these environments, including temperature extremes, low and high altitude, and in air/space travel.

**PBHL-A 380 Environmental Health Internship**

**(3-6 cr.)** P: Permission of Instructor. The internship in environmental health science provides students with an opportunity to gain meaningful and appropriate experience in any of the disciplines within environmental health. Students may seek internships in local, state, national, or international organizations in the government, not-for-profit, business, or industrial sectors, providing the work of the internship reflects one of the environmental health disciplines. Internships may be paid or unpaid.

**PBHL-A 410 FUNDAMENTALS OF TOXICOLOGY (3 cr.)**

This course is structured for those students desiring a basic understanding of the principles and practices of toxicology and how these are applied in the environmental regulator arena.

**PBHL-A 415 EXPLOSIONS, COLLAPSES, AND TOXIC SPILLS: PREVENTION & RESPONSE (3 cr.)**

An exploration of catastrophic global incidents that have caused large scale fatalities, injury, illness, and massive destruction. We will examine select case studies to determine events leading to the incident, the subsequent rescue and recovery efforts, impact on the public's health, and identification of causal factors to inform prevention strategies.

**PBHL-A 420 ARMED CONFLICT, NATURAL DISASTERS, AND HEALTH (3 cr.)**

Explores the environmental public health concerns facing refugee populations from armed conflict, natural disasters, and other forced migration. Examines the response from local and international organizations, the effects of inadequate resources, and future solutions to improve refugee health.

**PBHL-A 428 Public Health Sanitation (3 cr.)**

In this course, students will learn the fundamentals of proper food, water, and waste sanitation, and the impact healthy living conditions have on public health. We will discuss these fundamentals from the perspective of developed and developing countries and how the process of sanitation differs during emergencies and natural disasters.

**PBHL-A 430 E-waste, Toxic Materials, and Conflict Minerals (3 cr.)**

We will consider modern electronics from an environmental public health perspective. Using the lifecycle of electronics as a frame we will examine processes of production and use, consideration the people who do the work and the environment which provides the raw materials and absorbs the results.

**PBHL-A 433 Industrial Hygiene (3 cr.)**

There are nearly 5,000 workplace fatalities in the United States – about 13 deaths per day – and an estimated 50,000 annual deaths from work-related diseases. Approximately 10 million non-fatal injuries and illnesses occur each year. In this course, we will learn to anticipate, recognize, evaluate and control the hazards that face

workers each day, including chemical, physical, biological, and psychosocial stressors. Through problem-based learning, we will focus on applied problem solving.

**PBHL-A 435 Energy, Climate Change, Resilience, and Health (3 cr.)**

Climate change is a contentious, complex and important topic. In this course, we will address the whole complexity of climate change, explore its connection to energy consumption and discuss its impacts on human health and welfare and the possible remediation to together navigate a sustainable path of going forward both as a society and an individual.

**PBHL-A 440 Terrorism as a Public Health Threat (3 cr.)**

Explores mass casualty / high disruption weapons as a public health threat, with an emphasis on health protection of community members and first responders. We will examine multi-hazard emergency response frameworks; the structure/function of these weapons and their health effects; and the cycle of preparedness, response, recovery and mitigation.

**PBHL-A 441 Public Health Applications of GIS (3 cr.)**

Using ArcGIS Desktop software, this course aims to familiarize students with applications of Geographic Information Systems (GIS) in the context of public health. Public Health cases will be used to explain and teach principles, methods, and techniques.

**PBHL-A 445 Global Environmental Health & Sustainable Development (3 cr.)**

Analysis of how the global model of development is characterized by and influences relationships between the environment and human activities, and how such relationships influence human health. Based on the comprehension of such relationships, this course examines the possible approaches to control major environmental health problems in a sustainable manner.

**PBHL-A 450 Food and Water: Safety, Scarcity, Security (3 cr.)**

An exploration of food and water use, sanitation and safety, and its availability. We will examine the impact of human activity, including the demands of population growth, industrial development, and advancement in technology on food, water, and human health.

**PBHL-A 453 Study Abroad: Geneva (3 cr.)**

This course provides students with an in-depth introduction to global organizations responsible for supporting health leadership and health systems strengthening worldwide. Participants will spend substantial time out in the field meeting health experts and mid- to senior-level managers and leaders.

**PBHL-A 454 Study Abroad: London (3 cr.)**

This course provides an in-depth introduction to a global model for health services delivery and provides students with the opportunity to compare and contrast systems in England and the United States. Participants will spend substantial time out in the field visiting London-area health facilities, historical sites, and universities.

**PBHL-A 455 Study Abroad: Israel (3 cr.)**

This course provides an in-depth introduction to a global model for health services and provides students with the opportunity to compare and contrast systems in Israel and the U.S. Participants will spend time out in the field visiting health facilities, historical sites, and cultural locations in Tel Aviv and Jerusalem.

### **PBHL-B 275 PROBABILITY WITHOUT TEARS AND WITHOUT CALCULUS (3 cr.)**

This is a course teaching fundamental concepts in biostatistics through computer simulation. While this is a self-contained course, working knowledge of R or another computer language is desirable.

### **PBHL-B 280 Biostatistics for Health Data Scientists A Computational Approach (3 cr.)**

This course introduces students to the fundamental concepts of biostatistics through computational methods. Topics such as exploratory analysis of health data, probability and probability distributions, and the basics of inference from both the frequentist and Bayesian perspective will be presented.

**PBHL-B 285 Classical Biostatistical Regression Methods (3 cr.)** This is the first course in a two-semester sequence teaching fundamental concepts of classical regression methods in biostatistics, both linear (i.e., least squares) and non-linear (e.g., logistic, Poisson, etc.). While this is a self-contained course, working knowledge of the R statistical environment is desirable.

### **PBHL-B 300 INTRODUCTION TO BIOSTATISTICS (3 cr.)**

This is an introductory survey of statistical reasoning and analysis.

**PBHL-B 301 Biostatistics for Health Information Management (3 cr.)** This course introduces the basic principles and methods of data analysis in public health biostatistics. Emphasis is placed on public health examples as they relate to concepts such as sampling, study design, descriptive statistics, probability, statistical distributions, estimation, hypothesis testing, chi-square tests, t-tests, analysis of variance, linear regression and correlation.

### **PBHL-B 385 Contemporary Biostatistical Regression Methods (3 cr.)**

This is the second course in a two-semester sequence teaching fundamental concepts of contemporary regression methods in biostatistics, linear and non-linear. Advanced topics like shrinkage methods (principal components, ridge regression, Lasso, etc.), random effects and repeated measures, non-parametric regression (smoothing) and additive models will be presented. Pre-requisites are PBHL B-285 (Classical biostatistical regression methods) or permission of instructor. While this is a self-contained course, working knowledge of the R statistical environment is desirable.

### **PBHL-B 401 Health Data Science Internship I (3 cr.)**

This course provides real-world experience applying data science techniques in the form of an internship within the university or industry setting. Students in the Bachelor of Science program in Health Data Science will be matched with internship supervisors or organizations and undertake

projects geared towards applying skills they have acquired from the BS in Health Data Science curriculum.

### **PBHL-B 402 Health Data Science Internship II (3-4 cr.)**

This course provides real-world experience applying data science techniques in the form of an internship within the university or industry setting. Students in the Bachelor of Science program in Health Data Science will be matched with internship supervisors or organizations and undertake projects geared towards applying skills they have acquired from the BS in Health Data Science curriculum. Satisfactory completion of the course will be determined jointly by internship supervisor and HDS Faculty. Students should expect to submit a final project and oral report to either the organization internship supervisor, appointed HDS Faculty, or both.

### **PBHL-B 420 Introduction To Statistical Learning (3 cr.)**

This is a course teaching fundamental concepts of *statistical learning*, a broad set of methods which refers to making sense of complex data. Such methods include, but are not limited to, the sparse regression (e.g. LASSO), classification and regression trees (CART) and support vector machines. This course is intended for students starting out in this area who perhaps lack the mathematical training to absorb a very technical treatment of these topics. For this reason, this course focuses on the application with less focus on the mathematical details.

**PBHL-B 452 Fundamentals of Public Health Data Management (3 cr.)** This course teaches concepts related to research data planning, collection, storage, processing, and dissemination. The curriculum includes theoretical guidelines and practical tools for conducting public health research. Hands-on training with real-world examples and problem-solving exercises in SAS will be used to ensure that students are comfortable with all concepts.

### **PBHL-B 481 Introduction To Biostatistical Computing (3 cr.)**

This is a course teaching fundamental concepts of biostatistical computing, a broad set of skills required for data acquisition, processing and visualization. At the end of the course the student will be able to analyze and manage statistical data, use reproducible reporting functionality, write their own functions, apply string and document processing techniques, have an understanding of object oriented programming in R, use non-standard evaluation (NSE) techniques within the R language, and create reproducible software in package form for the R language.

### **PBHL-B 490 Advanced Biostatistical Computing (3 cr.)**

This is a second course in biostatistical computing covering advanced concepts including understanding the basics of statistical algorithms and creating data products. At the end of the course the student will understand object oriented systems available in the R programming language.

### **PBHL-E 202 Topics in Public Health (1-3 cr.)**

This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-E 210 Zombie Apocalypse and Doomsday Infections (3 cr.)** The focus is infectious diseases, the

possibility of a zombie infection. We will discuss infections that have changed the course of history. Included topics are: disease transmission, outbreak investigations, control measures, assessment, and field investigations.

**PBHL-E 303 Topics in Public Health (1-4 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-E 322 Principles of Epidemiology (3 cr.)** This course will introduce students to basic epidemiologic concepts including determinants of health and patterns of disease in populations, population health descriptive techniques, use of health indicators and secondary data sources. Students will gain an understanding of the role of Epidemiology in developing prevention strategies and policy. Among the topics to be covered are measures of mortality and morbidity, design and analysis of observational studies, community health assessment and program evaluation.

**PBHL-E 323 Chasing Disease Field Epidemiology (3 cr.)** Describing the application of epidemiology in a unexpected conditions in a population. This course, through the use of case studies, will explore the world of disease outbreaks and the field response.

**PBHL-E 330 Evidence-Based Public Health (3 cr.)** This course will introduce methods for generating, locating, assessing, adapting, and evaluating evidence for public health programs. In addition to establishing a framework for selecting evidence-based interventions, the course will include focus on principles of scientific writing necessary for public health professionals to convey messages to stakeholders.

**PBHL-E 333 Buzzed and Stoned: The Epidemiology of Substance Abuse (3 cr.)** This course will introduce students to substance abuse research from a public health perspective. We will utilize epidemiological concepts and tools to study distribution of alcohol, tobacco, and other drug use; identify social-behavioral factors that predispose individuals to engage in substance abuse and discuss health behavior theories and models; and review health and drug-control policy interventions. Students will learn key principles and concepts of substance abuse and addiction, and discuss short- and long-term effects of the primary drugs of abuse.

**PBHL-E 335 The Lurking Pandemic: Chronic Disease Epidemiology (3 cr.)** This course is designed to introduce the student to the ever-expanding area of chronic health conditions and diseases from an epidemiological perspective.

**PBHL-E 375 Fundamentals of Injury Epidemiology (3 cr.)** This course will introduce students to basic epidemiologic concepts of injury, both intentional and unintentional. Injuries associated with transportation, violence, home and occupational environments are included. We will discuss the burden of injury and its effect on public health, patterns of injury in populations, the use of descriptive techniques, and secondary data sources.

**PBHL-E 391 Public Health Surveillance (3 cr.)** Surveillance is the cornerstone of public health practice. In

this course, students explore the past, present and future of public health surveillance in the context of the U.S. and international health regulations. Students will examine past and current governance as well as systems that organize surveillance efforts at local, state, federal and global levels. Historical outbreaks and measures deployed by health agencies will illustrate key concepts. Students will also examine how informatics and advanced methods are helping to transform surveillance for the future.

**PBHL-E 395 Sores and Drips: Epidemiology of Sexually Transmitted Infections (3 cr.)** The burden of sexually transmitted infections continues to climb, not only in the U.S. but globally at an incredible pace.

This course will explore the epidemiology of sexually transmitted infections both in the U.S. and globally. Discussing the etiology of the STI's and methods of control and prevention. Through the use of case studies and historical exploration.

**PBHL-E 404 TOPICS IN PUBLIC HEALTH (3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-E 421 Epidemiology Counts (3 cr.)** This course focuses on the principles of analysis and interpretation of epidemiological studies and introduces how to execute these procedures using SAS. The course will emphasize the application of basic quantitative principles and procedures used in epidemiology to answer questions of public health significance using a case study approach.

**PBHL-E 422 Advanced Epidemiology (3 cr.)** This course is designed for undergraduate students to attain an intermediate to advanced depth of knowledge in epidemiological methodology. Specifically, this course provides students with (1) understanding of epidemiologic study designs; (2) knowledge on key concepts in epidemiology, such as confounding and effect measure modification; (3) an introduction to applied analytic approaches in epidemiological studies, including two hands-on computer lab sessions on basic statistical analysis using SAS software; (4) an overview of internal and external validity of epidemiological studies; (5) basics in causal inference.

**PBHL-E 490 Internship in Epidemiology (3 cr.)** This course provides epidemiology students with an opportunity to synthesize and apply from the BSPH program to the practice setting. Internship research projects can take place within local, state, national, or international governmental agencies, academia, nonprofit organizations, industry, or healthcare sectors, and must be led by a qualified preceptor.

**PBHL-E 491 Capstone in Epidemiology (3 cr.)** This course provides students the opportunity to synthesize and apply skills and knowledge from the BSPH program to study the distribution and determinants of health-related events. Students and their preceptors will develop and conduct research, prepare a scientific report of their findings, and present their work as a research poster.

**PBHL-H 100 Topics in Public Health (1-3 cr.)**



This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-H 101 Influencing the Public's Health (3 cr.)**

This course exposes students to the role of policy in influencing the health of human populations in our work, civil society and our own lives. Students from all disciplines will benefit from exploring empirical patterns and historical contexts that influence health policy decisions for our country's complex healthcare and public health systems.

**PBHL-H 120 HEALTH CARE DELIVERY IN THE US (1-3 cr.)**

An overview of the health care delivery system in the US from the lens of health care managers, this course will introduce the history of US health care, management in the health care delivery context, the role of government and policy in health care delivery, and the interconnectedness of health care delivery and public health. Health care administration career pathways will also be explored.

**PBHL-H 200 Health Care Accounting (3 cr.)**

Health Care Accounting will provide the students with a foundation in health care accounting from long-term to acute care. Topics will include balance sheet of financial position, income statement of revenues and expenses, journals, ledgers, trial balances and discrimination of formatting financial statements between acute care and long-term care organizations.

**PBHL-H 202 Topics in Public Health (1-3 cr.)**

This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-H 220 Public Health Systems Policy (3 cr.)**

This course will examine the concepts of health policy and management and its impact on social behavioral and environmental public health sciences. Content covered will include fundamental characteristics and organizational structure of the public health system.

**PBHL-H 245 PROFESSIONALISM IN THE HEALTHCARE WORKPLACE (3 cr.)**

This course provides an overview of healthcare organizational structures, professional self-presentation, business etiquette, and strategies for professional success in a healthcare workplace. An emphasis will be placed on each student's development and application of professional skills and behaviors required in healthcare administration and other sectors of the healthcare industry.

**PBHL-H 303 Topics in Public Health (1-3 cr.)**

This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-H 305 Medical Group Management (3 cr.)**

Medical Group Management is a survey course that will provide students with a foundation in understanding

the fundamental skills needed to manage medical group practices. The course will mainly examine the management of physician practices, including primary care, and physician specialty service lines.

**PBHL-H 310 LEAN METHODOLOGY IN HEALTHCARE ORGANIZATIONS (3 cr.)**

Using a combination of experiential (learn by doing) and lectures, students will be introduced to: the history of Lean and its rise in healthcare, identification and quantification of the value of waste removal in process oriented work systems, Lean thinking, facilitation, tools and leadership. Students will work independently and in small groups.

**PBHL-H 315 High-Risk Health Behavior and Harm Reduction (3 cr.)**

In this course, we will look at high-risk health behaviors through a public health lens. The term "high-risk" can refer to both behaviors and groups. High-risk behaviors are activities people engage in that make them more vulnerable to contracting specific health problems, while high-risk groups are collections of individuals prone to engage in high-risk behaviors. The effects of high-risk health behaviors extend beyond the individual who engage in them. This is a writing intensive course.

**PBHL-H 320 Health Systems Administration (3 cr.)**

This course explores components of the United States health care system and associated managerial, organizational, financial, insurance, delivery, quality improvement, workforce, performance, structures, issues and challenges. In addition, this course explores the organization and structure of public and private healthcare systems, and how recent changes in regulation and reimbursement are affecting significant change in the healthcare industry. Successful completion of this course will help provide students with a general foundation of knowledge about the U.S. health care system and major structural and organizational components, and how changes in health policy and regulation, along with changes in reimbursement, are helping to drive the integration of public health, private health, and social service organizations towards population health management.

**PBHL-H 325 HEALTH INFORMATION TECHNOLOGY MANAGEMENT AND POLICY (3 cr.)**

This course will familiarize students with current issues associated with health information technology (IT) and their impact on the U.S. healthcare system. Health IT applications are playing an increasingly important role in assuring high quality care and have the potential to transform the nature of healthcare delivery. This course will review the evidence on the impact of Health IT from the perspectives of hospitals, physicians, patients, payers, and society.

**PBHL-H 330 Global Public Health (3 cr.)**

All public health is global in today's world. This course will explore the key global public health issues that face countries throughout the world, ranging from malnutrition to the use of new technologies to improve health. The course will focus on the ways in which health policy of both developed and developing countries, impacts public health strategies, specific interventions, and outcomes.

**PBHL-H 345 Operations Management and Quality Improvement in Healthcare (3 cr.)**

This course provides an overview of the healthcare operations management

(OM), with emphasis on quality improvement. You will apply OM principles to develop more effective operational processes, mitigate risks, and improve quality. Discussions, case studies and assignments will focus on strategies and techniques of quality improvement processes, project management and others.

**PBHL-H 346 ORGANIZATIONAL BEHAVIOR & HUMAN RESOURCES FOR HEALTHCARE (3 cr.)**

This course introduces disciplines of organizational behavior and human resources management (HRM) and their application to the management of healthcare organizations. The course examines how to effectively manage individuals, teams and systems in the dynamic legal, social, and economic healthcare environment.

**PBHL-H 352 Health Finance and Budgeting (3 cr.)**

P: BUS-A 200 or BUS-A 201.

Health Finance and Budgeting is the study of the financial management of healthcare facilities based on generally accepted business practices. The topics will include: provider payment systems, healthcare financial statements, presentation and analysis, principles and practices in healthcare accounting, working capital management, budgeting and variance analysis.

**PBHL-H 353 Advanced Health Finance and Budgeting (3 cr.)** P: PBHL-H 352.

Advanced Health Finance and Budgeting builds on the elements learned in H352. The topics will include capital expenditure decisions, financing capital expenditures, defining cost information, time value analysis, and cost allocation strategies.

**PBHL-H 354 Health Care Economics (3 cr.)** This course applies economics to the study of administrative and policy issues in the health care sector. Economic concepts are used to explain the system of health care financing and the organization of health care delivery in the U.S. The economic evaluation of health care programs is also discussed.

**PBHL-H 361 LEADERSHIP IN HEALTH MANAGEMENT RESOLVING DISPUTES AND DIFFICULT CONVERSATIONS (3 cr.)** P: PBHL-H 320; junior

standing. Negotiation occurs every day in our professional and personal lives. Through readings, lectures, reflection, writing, and numerous in class exercises and simulations, this course will help students build principled dispute resolution and assertive communications skills critical to thriving in and leading through challenges arising in any healthcare setting.

**PBHL-H 375 Management of Health Service Organizations (3 cr.)**

This course explores the discipline of management and its major components relating to health service organizations. This course will provide students with a foundation of basic fundamentals, principles and techniques of management which have particular relevance and application in healthcare. Students will learn about management theory and its practical application in healthcare in fundamental areas such as planning, organizing, leading, and controlling. Other key elements of management such as communication, decision making, delegation, participatory management, leadership style, managing staff, teamwork, and

change and innovation will be explored. Successful completion of this course will help provide students with a general foundation of knowledge about management and its application in health service organizations. Instructional methods used will include lectures, interactive discussions, readings, in-class exercises and individual and group homework assignments using a wide range of management terms, concepts, fundamentals, theories, methods, techniques, and practices used in managing health service organizations. Special emphasis will be given to the role and application of leadership in the management of a diverse healthcare workforce, in a variety of health service settings. This course is designed to help create a foundation of knowledge and understanding of management that students will use in other courses in the public health undergraduate programs.

**PBHL-H 379 CAREER PREPARATION IN HEALTH SERVICES MANAGEMENT (3 cr.)**

This course will emphasize career planning and professional development in health services management. Students will be led through the internship search process in preparation for their practical experience in health administration. Health care workplace culture will also be explored.

**PBHL-H 380 Health Services Management Internship (1-6 cr.)** P: Permission of Instructor. The Internship

Course is designed to provide students with work experience that compliment their classroom preparation. The internship program is a self-directed program in which eligible students are responsible for identifying internship opportunities. Students are expected to identify potential opportunities and work with their faculty advisor to ensure these opportunities are appropriate to the student's knowledge and skills and suitable for the student's goals. It is offered from 1 to 6 credits with 80 hour increments of an internship experience equivalent to 1 credit hour.

**PBHL-H 401 Strategic Planning for Health**

**Organizations (3 cr.)** This course examines the strategic planning process and the compelling reasons for its relevance in today's dynamic healthcare environment. In this course, students will establish goals for the strategic planning process, and develop a strategic plan document and its major components, format and structure as applied in health service organizations. Students will examine and apply the strategic management process, and recognize and describe the supportive activities including the initial organizational "plan to plan"; board of directors "Kick off" meeting or retreat; stakeholder interviews using a structured questionnaire, and the major strategic plan document components that include the executive summary; directional strategies; environmental assessment; service area competitive analysis; internal analysis; SWOT analysis; strategic initiatives; strategic action plan implementation monitoring, measurement and evaluation; and strategic thinking and momentum. In addition, the final deliverables (completed in assigned teams) include compiling / finalizing a strategic plan document for a health services organization, and an in-class business presentation of the strategic plan.

**PBHL-H 404 Topics in Public Health (3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs,

this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-H 411 Chronic And Long Term Care Administration (3 cr.)**

This course is an introductory study of the purpose, organization, and management of long-term care services and providers. The course will provide an understanding of who receives long-term care service; the venues in which services are provided; how services are provided; how providers are regulated; how they are paid; and career opportunities. The course will focus upon the needs of the elderly; the role of long-term care as a member of the healthcare services provider community; and, the organization and structure, of the continuum of long-term care provider types. The impact of the regulatory processes upon management of personnel, services and finances will be studied in detail. Current issues, including quality improvement initiatives impacting the future of long-term care will be reviewed.

**PBHL-H 420 Health Policy (3 cr.)** P: PBHL-H 320.

This course will provide the opportunity to examine and analyze the financing, organization and delivery of health care in the U.S. and how these core elements are shaped and influenced by health care policy and decision-making. Additionally, we will examine the landmark health care reform currently being implemented vis-a-vis the Patient Protection and Affordable Care Act (PPACA) of 2010, also known as Obama Care. <http://www.healthcare.gov/law/full/index.html>

**PBHL-H 432 Health Care Marketing (3 cr.)** A practical study of marketing in health care institutions, health service organizations, and health insurers. A basic foundation in marketing principles, new methods in marketing products and services, and inexpensive marketing techniques will be examined.

**PBHL-H 441 Legal Aspects of Health Care Administration (3 cr.)**

This course will familiarize students with, and introduce students to, the legal and regulatory terrain unique to health care facilities by providing an overview of the legal liabilities and obligations of health care providers as well as the potential legal recourses available.

**PBHL-H 450 HEALTH SYSTEMS AROUND THE WORLD: UNDERSTANDING ENGLAND'S NATIONAL HEALTH SERVICE (3 cr.)** This course provides an in-depth introduction to a global model for health services delivery and provides students with the opportunity to compare and contrast systems in England and the United States. Participants will spend substantial time out in the field visiting London-area health facilities, historical sites, and universities.

**PBHL-H 455 Topics in Public Health (1-3 cr.)** Extensive discussion of selected topics in public health. The topic may change from semester to semester, based on resource availability and student demand. May be repeated for credit.

**PBHL-H 474 Health Administration Ethics Seminar (3 cr.)** P: PBHL-H 320 and Senior Standing.

This course will follow an interactive, theory-based approach to examine ethical decision-making challenges from health care provider, managerial, and public health perspectives. It will examine ethical dilemmas in the context of health services delivery to facilitate discussion about the broader implications of decisions made. Students must exhibit the ability to think critically about society and culture, social determinants that influence health outcomes, and the duties and responsibilities of health care actors at the individual, organizational, and societal levels to improve health care delivery as well as outcomes. Lastly, students are expected to demonstrate the ability to apply theories and principles to address complex ethical issues related to health care delivery and administration.

**PBHL-H 475 Health Services Management Capstone (3 cr.)** P: Prerequisite: PBHL-H 200 with "C" or better or BUS-A 201 with "C" or better or BUS-A 200 with "C" or better.

This course will emphasize the application of knowledge gained in the in the major to real health care scenarios. Additionally, students will reflect on and evaluate their personal and professional growth and build on their internship experiences to prepare themselves for the transition to professional life in a health care setting.

**PBHL-P 100 Topics in Public Health (1-3 cr.)** An introduction to public health disciplines, topics and issues.

**PBHL-P 109 Introduction to Public Health (3 cr.)**

Introduction to public health using Indianapolis as case study. Well-being, illness, injury, education, violence, housing, work, cultural and neighborhood variability will be examined to demonstrate the public health perspective on any situation and to see how the state of health in our city connects to the nation and the world.

**PBHL-P 200 Topics in Public Health (1-3 cr.)** An introduction to public health disciplines, topics and issues.

**PBHL-P 300 Topics in Public Health (1-3 cr.)** An introduction to public health disciplines, topics and issues.

**PBHL-P 450 Study Abroad: London (3 cr.)** This course provides an in-depth introduction to a global model for health services delivery and provides students with the opportunity to compare and contrast systems in England and the United States. Participants will spend substantial time out in the field visiting London-area health facilities, historical sites, and universities.

**PBHL-P 451 Study Abroad: Sweden (3 cr.)** This course provides an introduction to a globally admired model for health services delivery and provides students with the opportunity to compare and contrast systems in Sweden and the United States. Participants will spend substantial time out in the field visiting Stockholm-area health facilities, historical and cultural sites.

**PBHL-P 452 Study Abroad: Nicaragua (3 cr.)** This course provides an in-depth introduction to the health system in Nicaragua and provides students with the opportunity to compare and contrast systems in Nicaragua and the United States. Participants will spend substantial time out in the field visiting the Nicaraguan health facilities, historical and cultural sites and will participate in a service project constructing composting latrines to improve public

and environmental health in the rural community of La Concepcion.

**PBHL-P 453 Study Abroad: Geneva (3 cr.)** This course provides students with an in-depth introduction to global organizations responsible for supporting health leadership and health systems strengthening worldwide. Participants will spend substantial time out in the field meeting health experts and mid- to senior-level managers and leaders.

**PBHL-P 457 Study Abroad: El Salvador (3 cr.)** This course provides an in-depth introduction to the health system in El Salvador and provides students with the opportunity to compare and contrast systems in El Salvador and the United States. Participants will spend substantial time out in the field visiting the El Salvadoran health facilities, historical and cultural sites and will participate in a service project constructing composting latrines to improve public and environmental health in the municipality of Suchitoto.

**PBHL-S 105 Movies, Music, and Public Health (3 cr.)** This undergraduate course will expose students to a variety of public health issues portrayed in movies, music, and other media. Students will view and critically analyze a series of selected films, albums, television shows, documentaries, podcasts, and readings relevant to current public health trends.

**PBHL-S 120 Introduction to Community Health (3 cr.)** This course offers students a basic introduction to community health. The class will present health issues with a focus on a community, not individual perspective; as a result, students will learn about public health approaches to health assessment, health promotion and disease prevention.

**PBHL-S 220 Navigating the Maze to Healthy Living (3 cr.)** This course provides students with knowledge and understanding of factors influencing personal health, health behaviors, health promotion, and disease prevention. The course emphasizes lifestyles and personal decision making as a consumer of health and health care services.

**PBHL-S 222 This Stress is Killing Me: Stress And Its Effects On You (3 cr.)** This course will teach you all about stress and its effect on your body and mind. You will learn the biology of stress, factors that protect you from stress or make you more vulnerable to it and the experience of stress in various settings, such as work, family and community. You will also learn how to manage stress.

**PBHL-S 240 Peer Health Education and Leadership (3 cr.)** Peer Health Education and Leadership will consist of classroom and online components. Students will be engaged with in-classroom workshops facilitated by the Office of Health and Wellness Promotion staff and campus partners, focused on content education and skills training. Students will also learn, discuss, and reflect with their peers in an online environment, building a foundational understanding of health and wellness topics and aspects of leadership development.

**PBHL-S 250 Social and Behavioral Dimensions of Public Health (3 cr.)** This course introduces students

to the social and behavioral science principles that provide the foundation for how public health engages with people and communities to prevent disease and promote health. Students will explore topics that promote a broad understanding of determinants of health and the multiple factors contributing to health and illness.

**PBHL-S 303 Topics in Public Health (1-3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-S 305 Careers in Public Health (3 cr.)** This undergraduate course will expose students to a variety of public health careers and provide skills necessary for identifying and obtaining a career in public health. Students will have the opportunity to interact with professionals from the private and public sectors who will introduce students to the many careers in public health and to the various roles and functions of public health professionals. Students will engage in professional development through various activities including developing a personal career plan, job seeking strategies, resume design, and interview techniques to prepare them for professional careers.

**PBHL-S 315 Community Organizing for Health Promotion (3 cr.)** P: PBHL-S 120. Through this course, students will learn processes for community assessment, organizing, and advocacy. The course will address methods for strengthening communities to prevent and solve community health problems while building students' civic identity, leadership, and management skills.

**PBHL-S 325 Urban Angst.Suburban Blues: Public Mental Health (3 cr.)** This course will examine how the mental health of communities is influenced by geopolitical influences, SES, neighborhood, safety, culture, environment, community and other elements external to the individual. Using textbooks, case study readings, and multimedia we will analyze causes of mental (dis)ease in the general public and develop a stronger understanding of how the outside world can impact the health of the mind.

**PBHL-S 330 THEORETICAL FOUNDATIONS OF COMMUNITY HEALTH (3 cr.)** This course will explore the theories of health behavior change that are used to develop health interventions for individuals and communities. Students will learn different theories, how to put them into practice, and how useful and practical they are for various populations and contexts.

**PBHL-S 337 Health Equity and Social Determinants of Health (3 cr.)** This course introduces students to an ecological perspective of health, going beyond biology and individual factors to investigate the influence on health of the social systems in which individuals live, work, learn, and play. Through the lens of social justice, students will examine how contemporary social issues influence populational differences in health (health disparities).

**PBHL-S 340 Cultural Considerations in the Promotion of Health (3 cr.)** In this course we will examine what is meant by culture, the ways in which culture intersects with health issues, and how public health efforts (domestic and

global) can benefit by understanding and working with cultural processes.

**PBHL-S 349 Research Methods in Community Health (3 cr.)** P: PBHL-B 300 or permission of instructor; This course helps students develop an appreciation and understanding of the fundamental research methods used in community health and how to apply those methods to inform their work to improve the health of the community. The focus is on understanding how community - and personal - level data are collected and interpreted in scientifically valid ways. Students will become proficient consumers and users of published research and will be able to identify the strengths and limitations of the designs used, along with possible confounding factors and biases.

**PBHL-S 360 Assessment and Planning for Community Health Promotion (3 cr.)** P: PBHL-S 330 This course applies theory-based concepts and methods of health promotion focusing on needs assessment and intervention planning for individual and community health programs.

**PBHL-S 361 Implementation and Evaluation for Community Health Promotion (3 cr.)** P: PBHL-S 330 and PBHL-S 360 This course applies theory-based concepts and methods of health promotion focusing on program funding, implementation, and evaluation for individual and community health programs.

**PBHL-S 415 Applied Health Promotion Methods (3 cr.)** This course provides students with understanding, application, and practice of key methods in community health promotion including health communication, health education, health policy, and community mobilization strategies. Application of theory and implementation of methods at individual and community levels are addressed.

**PBHL-S 416 Health Promotion Applications (3 cr.)** P: PBHL-S 361 This course provides students with opportunities to apply and practice key methods in community health promotion. Emphasis is on utilizing simulations, workshops, and training programs to acquire professional skills and certifications to expand the resume and professional portfolio.

**PBHL-S 422 Coaching for Health and Wellness (3 cr.)** This course is designed to teach students how to coach individuals and groups attempting to improve their health behaviors. Theory, evidence-based practices, and different types of communication and interviewing styles will be explored through hands-on activities. Students will practice the learned techniques throughout the semester and will be able to apply these techniques upon completion of the course. Students planning to become health educators, health care providers, and others interested in guiding behavior change will benefit from this course.

**PBHL-S 460 Biosocial Approach to Global Health (3 cr.)** The course will provide students with an opportunity to examine key global health issues using a biosocial justice perspective. Students will participate in authentic global health work as they will partner with MPH students from a university global partner to develop a strategic plan to address a global health issue. The course will require students to engage in analytical reading and

discussions, and produce and deliver impactful written and oral communications.

**PBHL-S 469 Practicum in Community Health (3 cr.)** P: PBHL-S 361, senior standing, permission; The course integrates academic elements and on-site work objectives in a 180-hour experience in an approved community health setting. The practicum provides students with observation and experience in a minimum of three of the responsibility areas outlined in the national Responsibilities and Competencies for Entry-Level Health Education/Promotion Specialists (NCHEC).

**PBHL-S 479 Internship in Community Health (3 cr.)** P: PBHL-S 361, senior standing, permission; The course integrates academic elements and on-site work objectives in a 360-hour experience in an approved community health setting. The internship provides students with observation and experience in a minimum of four of the responsibility areas outlined in the national Responsibilities and Competencies for Entry-Level Health Education/Promotion Specialists (NCHEC).

**PBHL-S 499 Capstone Experience: BSPH in Community Health (3 cr.)** P: Students must be in their last semester of the senior year. The capstone is a culminating experience that pulls together and puts into practice the relevant knowledge from the undergraduate experience, and provides a stepping stone to the intended careers and/or next-level learning and educational pursuits. The capstone experience requires students to integrate the knowledge, skills, and dispositions acquired during their entire academic career as it connects to their discipline of study, reflect on personal growth and professional development, produce a tangible deliverable that requires a significant investment of time and effort, and share tangible deliverables with stakeholders.

## Graduate Courses

**PBHL-A 602 Internship in Environmental Health Science (3 cr.)** P: MPH Core Curriculum (5 courses); Consent of Faculty Advisor. This course integrates public health theory and practice in a practice setting. Students have the opportunity to apply concepts from core and concentration courses, conduct projects, and interact with a range of health professionals in the designated setting. Linked to the student's chosen concentration, this work experience exposes the student to new issues and new ways to solve problems and offers the student an opportunity to gain work experience in his/her concentration major and, at the same time, provides valuable job skills. The student works both with a faculty advisor and an academically and professionally qualified preceptor in the agency.

**PBHL-A 617 ENVIRONMENTAL EPIDEMIOLOGY (3 cr.)** The course will introduce epidemiological studies of environmental/occupational agents, focusing on study design, biases, and methodological tools used to evaluate and extend the evidence linking exposures to human diseases. We will discuss applications, strengths, and limitations of different study designs and their use in studying specific environmental agents.

**PBHL-A 623 MANAGEMENT AND LEADERSHIP IN HEALTH PROTECTION (3 cr.)** Explores concepts to integrate the expertise and efforts of health protection professionals into a broader

organization/workplace to influence strategy and create impact. We will examine discipline-specific elements of management systems, establish professional skills, and navigate work situations and effective communication strategies for health protection.

**PBHL-A 633 Occupational Health and Safety for Public Health Professionals (3 cr.)**

Each year, thousands of workers throughout the world are killed, injured, or otherwise adversely affected by chemical, biological, and/or physical, agents encountered in the workplace. Common hazards include dusts, gases and vapors, bio-aerosols, pathogens, noise, and ionizing and non-ionizing radiation. Ergonomic stresses and safety hazards are also important causes of workplace morbidity and mortality. The goal of this course is to educate individuals to anticipate, recognize, evaluate, control, and manage such workplace health risks.

This course is a survey of the technical and regulatory aspects of protecting the health and safety of workers. Topics include basic toxicology; skin, eye, and respiratory hazards; measuring hazardous atmospheres; ventilation systems; fire and explosion hazards; emergency response; noise-induced hearing loss in the workplace; radiation; accident prevention; cumulative trauma; and personal protective equipment. The course provides students with an introduction to the principles and practice of industrial hygiene. Industrial hygiene is concerned with the anticipation, recognition, evaluation and control of environmental and occupational factors that pose hazards to health and safety in the workplace. These aspects parallel the basic components of risk assessment: hazard identification, dose-response determination, exposure assessment, risk assessment, and risk management. Greater attention is focused on anticipation, recognition, and evaluation, but some consideration of control methods and hazard communication will also be included. These functions all require a sound understanding of basic toxicology, procedures for investigation, methods of exposure measurement and assessment, behavior of chemical and physical agents in the environment, and the application of guidelines and standards, topics which form the primary elements of the course.

**PBHL-A 640 Public Health Applications of GIS (3 cr.)**

Using ArcGIS Desktop software, this course aims to familiarize students with applications of Geographic Information Systems (GIS) in the context of public health. Public Health cases will be used to explain and teach principles, methods, and techniques. Topics include creating layer packages in ArcMap, health data visualization, map design, health data downloading, geocoding tabular data, and spatial analysis and spatial joins.

**PBHL-A 641 Introduction to Global Health and Sustainable Development (3 cr.)** Cycles of instability, conflict, and ineffective governance impede sustainable development, thereby limiting advances in preventable disease, injury, and death. In this course, we will explore the global landscape of morbidity and mortality, its connectedness to security and prosperity, and the investments and partnerships needed to ensure sustainable development, health, and well-being.

**PBHL-A 642 Poverty, Decent Work, and Inequality (3 cr.)** Eradicating poverty is fundamental for the health of the global population, sustainable development, and achieving health equity. In this course we will analyze the connected systems of decent work, social protection, and education, and propose strategies and roles for public health professionals to reduce inequality and foment health-sustainable systems.

**PBHL-A 643 Water and Sanitation (3 cr.)** The availability of safe drinking water and basic sanitation systems are barriers to development and health. We will examine the current state of the fundamental and related problems, the global public health impact, subsequent impediments to development, and solutions to overcome these barriers.

**PBHL-A 644 Sustainable Production and Consumption (3 cr.)** Parallel challenges of both over- and under-consumption tax our natural resources, including food supplies, dirty our environments, and hinder sustainable development and public health globally. This course will assess over- and under-consumption as interrelated systems problems, and analyze both structural and individual changes in support of healthy consumption and production.

**PBHL-A 645 Resilient Cities and Communities (3 cr.)** Unprecedented migration to urban centers, and subsequent concentration of extreme poverty, impedes sustainable development. This is further complicated by the impact of climate change on infrastructure. We will explore the public health principles that help ensure safe, health promoting, and sustainable cities and communities.

**PBHL-A 646 Preservation and Restoration of Land and Sea (3 cr.)** Overfishing and pollution of the world's oceans and fresh water systems, along with land degradation and deforestation, continue at alarming levels. We will assess the current state of the natural environment, its impact on public health and development, and explore paths toward restoration and protection of land, coastal, and marine ecosystems.

**PBHL-A 650 Readings in Public Health (1-3 cr.)**

This course is designed to expose the student to published material on a specific topic or technique in the field of Public Health. The material to be studied will be determined primarily by the student under the direction of a faculty member with input from the student's concentration advisor. The student is expected to work closely with the faculty member to develop a strategy to identify the material to study, plan a time frame for completion of the study and to determine the nature of the study product. Generally the product will be a summary and interpretation of the material studied in a literature review format. The student and faculty member will complete a written agreement, which outlines the scope of work for the semester. This agreement will also be signed by the concentration advisor.

**PBHL-A 661 Fundamentals of Toxicology (3 cr.)**

P: PBHL-A 609. This class will give students a solid introduction to toxicology and the ways in which environmental exposures can contribute to human disease. The course will also introduce the regulatory settings in which environmental toxicology is key.

**PBHL-A 662 Human Health Risk Assessment (3 cr.)**

Human Health Risk Assessment is the basis for making decisions related to human health. This course will examine the basic principles and methods of conducting human health risk assessments and how risk is managed and communicated to the public. Applications emphasizing real scenario will be used to illustrate the interdisciplinary process and products of risk assessment, as well as the regulatory use of the information.

**PBHL-A 670 Topics in Public Health (1-3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-A 675 Regulatory Affairs for Product Stewardship (3 cr.)** This course explores the major national and international legislative, regulatory, and voluntary frameworks that impact manufacturing, importing, and placing products into commerce, and aspects for compliance management for businesses.

**PBHL-A 676 Product Stewardship Strategy and Management (3 cr.)** This course explores how businesses asset and attain overarching goals by integrating risk assessments, regulatory, and other considerations.

**PBHL-A 677 Product Hazard, Exposure & Risk Assessment (3 cr.)**

Examines product hazards against probable and misuse exposure scenarios that translate into a risk assessment. Explores a framework to assess risk throughout the product supply chain to determine and document appropriate and effective systems for ongoing assessment and management of product and business risk.

**PBHL-A 678 Product Improvement and Sustainability (3 cr.)** Presents best practices in product design, focusing on materials selection, packaging and sustainability.

Examines alternatives in the product development cycle where improvement opportunities exist to reduce potential impact on human and environmental health while providing comparable or superior efficacy, and competitive advantage to business.

**PBHL-A 680 Fundamentals of Product Stewardship (3 cr.)** Throughout a product's lifecycle, environmental, health, safety, and societal issues must be successfully managed to protect the public and environment while maximizing a company's economic value. A holistic approach to sound, disciplined Product Stewardship competencies will be provided, and applied through case-based learning

**PBHL-A 700 Environmental Health Continuous Enrollment (1 cr.)** P: PBHL-A 703. This course is a one-credit course designed for MPH students who previously registered for PBHL-A 703 Environmental Health Concentration Project and are working on their Final Concentration Project until project grade has been assigned.

**PBHL-A 703 Environmental Science Final Concentration Project (3 cr.)** P: MPH Core; Public Health Internship. This course provides students the opportunity to synthesize and integrate knowledge

acquired through course work and the public health internship by conducting an environment health study or assessment. Student projects will include components of environmental health research and application.

**PBHL-A 755 ORGANIZATIONAL LEADERSHIP THEORY AND PRACTICE (2 cr.)** This course provides an overview of the theoretical framework for organizational leadership in field settings. We will focus on specific leadership topics such as team leadership, change and innovation processes. Special emphasis will be placed on leadership styles and the relevance of context and geographic location in the world.

**PBHL-A 756 LEADERSHIP IN GLOBAL HEALTH LAW AND ETHICS (2 cr.)** Overview of critical issues relating to law, ethics, and global public health, including legal foundations of the American public health system and ethical dilemmas. We compare and contrast the American perspective with those of other countries and governance structures.

**PBHL-A 757 A POPULATION PERSPECTIVE FOR GLOBAL HEALTH (1 cr.)** This course is designed to enable learners to understand what "population health" means in the context of contemporary politics and public health. The course provides learners with a basic familiarity of the use of epidemiology and aggregate measures in political and policy contexts.

**PBHL-A 758 INITIATING THE RESEARCH PROCESS (1 cr.)** This course is designed to enable learners to understand what "population health" means in the context of contemporary politics and public health. The course provides learners with a basic familiarity of the use of epidemiology and aggregate measures in political and policy contexts.

**PBHL-A 759 Leadership in Global Health Systems (2 cr.)**

Critical examination of current issues in global health systems prepares students to confront organizational and policy challenges. Examine trends in global health reforms and governing structures. Explore leadership expectations of diverse stakeholders, inside and outside government, and how they may be met with critical thinking, analysis, and application.

**PBHL-A 760 Essentials of Practice-Based Research (2 cr.)**

Review basic research techniques used in health services research, including qualitative and quantitative methods. Special emphasis is placed on applying these skills in "real world" settings where data may not be perfect and conditions may make it necessary to compromise in applying research techniques used in more controlled settings.

**PBHL-A 761 Literature Review and Appraisal (2 cr.)**

This course introduces methods for identifying, exploring and evaluating literature relevant to students' proposed dissertation topics in a scholarly and systematic way. The course also prepares students to effectively review research for decision-making and other applications in their roles as senior leaders in organizations.

**PBHL-A 762 The Science of Global Health**

**Implementation (2 cr.)** This course provides students

with an introduction to the topic of implementation science including immediately applicable problem solving and analytical skills relevant to those working in global public health settings. The course introduces a suite of tools for each step of the implementation framework, allowing students to understand the suitability of different tools for different applications.

**PBHL-A 763 Leadership Challenges in Global Health Informatics (2 cr.)**

This course provides students with insights into timely issues relating to global health informatics. The course helps students understand current global challenges and opportunities in health informatics and equips them with the skills and knowledge they need to effectively identify and address information needs in organizations.

**PBHL-A 765 Financing Global Health (2 cr.)**

The course will focus on how development assistance for health (DAH) is changing and implications for the public's health. Students will discuss global health related financial goals and priorities. They will become acquainted with principles of political economy and the structures and governance of financing institutions related to DAH worldwide.

**PBHL-A 766 FUNDAMENTALS OF RESEARCH ANALYSIS (3 cr.)** Students refine their methodology, increasing their understanding of how specifically to implement it, including how to manage and organize data and how to present the data results. This course emphasizes collection of primary data through questionnaires or surveys, focus groups and key informant interviews.

**PBHL-A 767 Executive Communication for Global Health Leaders (2 cr.)** Media for communication include traditional outlets as well as new and emerging electronic media. Sensitivity to timing, context, culture, and best practices can maximize the effectiveness of executive communication within and outside their own organizations. This course introduces topics in executive communication necessary for senior leaders to be effective.

**PBHL-A 768 Global Health Policy and Advocacy (2 cr.)** Review frameworks for global policy processes then take an in-depth look at one approach and its basic steps, applying it to select cases. The course considers key concepts in development of an advocacy agenda using strategies tailored to the policy environment and designed to move policies in the desired direction.

**PBHL-A 769 Strategic Theory and Practice in Global Health Leadership (2 cr.)**

This course focuses on theories and principles of strategic leadership of organizations with a mandate to provide health care services. Coursework will address such strategic leadership issues as a basis for ensuring resource efficiency and effective operations. The course also addresses strategic challenges relevant in a global context.

**PBHL-A 770 Marketing and Public Relations for Global Health Leaders (2 cr.)**

Senior leaders must be aware of key concepts in marketing and PR. Fundraising efforts must be supported by organizational leaders to advance the interests of

the organization and serve the public good. This course provides insights into executive competencies related to external relationships influenced through marketing, PR and organizational development.

**PBHL-A 771 Program Evaluation for Global Health Leaders (2 cr.)**

Review key evaluation theories and frameworks, selection of evaluation questions, evaluation design and data collection strategies, reporting evaluation results, and the political, ethical, and interpersonal considerations in evaluation. Some topics, including research design and data collection strategies, reinforce previous course content.

**PBHL-A 777 Dissertation Planning and Preparation I (1-2 cr.)**

This course guides students through the steps necessary to produce the outline of a dissertation proposal. In collaboration with faculty, students will assess the current state of their research questions and literature reviews and generate work plans for revisions, additional refinements and the addition of preliminary ideas about methodology.

**PBHL-A 778 Dissertation Planning and Preparation II (1 cr.)**

This is the second in a two-part series to guide students through the steps necessary to produce a draft dissertation proposal. In close collaboration with course faculty and the students' dissertation committee chairs and committee members, students will refine their proposals in preparation for oral defense.

**PBHL-A 805 Doctoral Dissertation (1-9 cr.)** Students work independently, in collaboration with dissertation committee chairs and committee members, to complete dissertations. The DrPH dissertation is the ultimate academic test of a student's competency. It requires application of key aspects of the curriculum to improving the understanding of an important public health-related administrative or policy issue.

**PBHL-B 552 Fundamentals of Data Management (3 cr.)** This course teaches concepts related to research data planning, collection, storage, processing, and dissemination. The curriculum includes theoretical guidelines and practical tools for conducting public health research. Hands-on training with real-world examples and problem-solving exercises in SAS will be used to ensure that students are comfortable with all concepts.

**PBHL-B 561 Introduction to Biostatistics I (3 cr.)**

P: One year undergraduate mathematics is required. Working knowledge on linear algebra and elementary calculus is expected. Students with insufficient mathematics preparation are expected to remedy the deficiency on their own. This course introduces the basic principles and methods of data analysis in public health biostatistics. Emphasis is placed on public health concepts such as sampling, study design, descriptive statistics, probability, statistical distributions, estimation, hypothesis testing, chi-square tests, t-tests, analysis of variance, linear regression and correlation. SAS software is required.

**PBHL-B 562 Biostatistics for Public Health II (3 cr.)**

P: PBHL-B 551 or PBHL-B 561 or one semester of



graduate level Biostatistics. This course introduces the advanced principles and methods of data analysis in public health biostatistics. Emphasis is placed on public health examples as they relate to concepts such as: Multiple regression, analysis of variance and covariance, logistic regression, nonparametric statistics, survival analysis, epidemiology statistics, and repeated measures analysis.

**PBHL-B 571 BIO METHODS I: LINEAR MODELS IN PUBLIC HEALTH (4 cr.)** P: PBHL-B 551 or equivalent.

This course introduces some basic designs of experiment and analysis tools for outcome data of continuous variable, such as Analysis of Variance (ANOVA), Analysis of Covariance and Linear Regression Analysis. SAS programming language will be the primary statistical analytical tool for the course.

**PBHL-B 572 BIOSTATISTICS METHOD II: CATEGORICAL DATA ANALYSIS (4 cr.)** P: PBHL-B 551 or equivalent.

This course covers applied statistical methods for the analysis of categorical data with special emphasis on data collected from epidemiologic studies and general biomedical studies. The topics delivered in this course will focus on methods of categorical analysis commonly used in practice of the health sciences.

**PBHL-B 573 BIOSTATISTICS METHOD III: APPLIED SURVIVAL DATA ANALYSIS (4 cr.)** P: Students must have taken one course in basic statistics and another course in linear regression models. Students must have prior knowledge of SAS for completion of homework. This course covers the basic concepts of survival analysis, Kaplan-Meier curves, logrank test, Cox proportional hazard model, parametric survival models, and certain extensions. Expectations upon completion: for survival data, you should know which method to use, how to implement in software and how to interpret the results.

This course covers the basic concepts of survival analysis, Kaplan-Meier curves, logrank test, Cox proportional hazard model, parametric survival models, and certain extensions. Expectations upon completion: for survival data, you should know which method to use, how to implement in software and how to interpret the results.

**PBHL-B 574 BIOSTATISTICS METHOD IV: APPLIED LONGITUDINAL DATA ANALYSIS (3 cr.)** This course covers modern methods for the analysis of repeated measures, correlated outcomes and longitudinal data, including the unbalanced and incomplete data frequently encountered in biomedical research. Class presentations and homework assignments will focus on data analysis in SAS using PROC GLM, PROC MIXED, PROC GENMOD, and PROC NL MIXED.

**PBHL-B 581 Biostatistics Computing (3 cr.)** This course introduces the necessary SAS skills for general data preparation, description, visualization, and some advanced skills. After successfully finishing this course, you will be able to perform at entry-level graduate research assistant positions and be prepared for biostatistical method courses. Data steps and the following procedures will be covered: IMPORT, SORT, PRINT, FORMAT, TABULATE, REPORT, MEANS, UNIVARIATE, FREQ, CORR, SQL, GPLOT, SG PLOT, SGPANEL, NPAR1WAY, POWER. Additionally, SAS macro, ODS and IML will also be introduced.

**PBHL-B 582 Introduction to Clinical Trials (3 cr.)**

P: Analysis of variance and regression (G652 or equivalent). A working knowledge of biostatistics is assumed and general familiarity with clinical trials will be helpful. This is a standard course that prepares

Biostatisticians for support of clinical trial projects. The course will cover fundamental aspects of the appropriate design and conduct of medical experiments involving human subjects (clinical research/trials) including ethics, design, sample size calculation, randomization, monitoring, data collection, analysis and reporting of the results.

**PBHL-B 583 Applied Multivariate Analysis (3 cr.)**

The course will focus on applications to real data, which will be analyzed by the professor and the students using the SAS software. One priority of the course will be to have students perform many analyses on real data sets, via SAS take-home labs, to prepare students for real life applications in analyzing data and interpreting results. Students will gain experience in preparing data for analyses by merging data sets and recoding variables.

**PBHL-B 584 Biostatistics Practicum (3 cr.)** Statistical data analysis and study design is an art in practice. When and how to apply different statistical models and the interpretation of data analysis results is heavily driven by experience. This course is designed to develop students' skills in study design, data analyses, and oral and written communication through multiple real-life projects.

**PBHL-B 585 Analysis and Interpretation of Observational Studies (3 cr.)** P: PBHL-E 715. and B-652 or equivalent

This course is designed for students in the PhD program in Epidemiology. Advanced students in the Master of Public Health degree program, Epidemiology concentration may register for this course with the permission of the professor. This course examines fundamental aspects of analyzing data generated by observational epidemiology studies. The focus is on developing a solid understanding of contemporary analytical techniques to increase the validity of the study and control for possible confounding factors and biases.

**PBHL-B 586 Technical Writing and Scientific Reporting (3 cr.)** Biostatistics is an applied field that requires effective written communication. This one credit hour course is designed to help graduate students developing the necessary writing skills to produce clearly written and well-structured scientific reports.

**PBHL-B 602 Internship in Biostatistics (3 cr.)** P: MPH Core Curriculum (5 courses); Consent of Faculty Advisor. This course integrates public health theory and practice in a practice setting. Students have the opportunity to apply concepts from core and concentration courses, conduct projects, and interact with a range of health professionals in the designated setting.

**PBHL-B 616 Advanced Statistical Computing (3 cr.)**

This course will cover selected computational techniques useful in advanced statistical applications and statistical research. Topics to be covered include methods for solving linear equations, numerical optimization, numerical integration, Expectation-Maximization (EM) algorithm, Monte Carlo method, Bayesian methods, bootstrap methods and stochastic search algorithms.

**PBHL-B 626 Advanced Likelihood Theory (3 cr.)** P: Stat 519 and Stat 528, or Equivalent.

This course covers theoretical foundation of statistical inference with focus on likelihood theory and its application on biomedical studies. It provides a good preparation for advanced biostatistics

courses such as Advanced GLM, Advanced Longitudinal Data Analysis, and Advanced Survival Analysis.

**PBHL-B 636 Advanced Survival Analysis (3 cr.)**

P: Stat 528 and Stat 536 Addresses the counting process approach to the analysis of censored failure time data. Standard statistical methods in survival analysis will be examined.

**PBHL-B 646 Advanced Generalized Linear Models (3 cr.)**

P: Students taking this course should have formal training in applied linear and generalized linear models. In addition, they should have a basic understanding of the theory of probability, statistical estimation and inference. Students who are not adequately prepared in aforementioned areas are expected to make up for the deficiency on their own. The theory of classical and modern approaches to the analysis of clustered data, repeated measures, and longitudinal data.

**PBHL-B 650 Readings in Public Health (1-3 cr.)**

This course is designed to expose the student to published material on a specific topic or technique in the field of Public Health. The material to be studied will be determined primarily by the student under the direction of a faculty member and student will complete a written agreement, which outlines the scope of work for the semester.

**PBHL-B 656 Advanced Longitudinal Data Analysis (3 cr.)**

P: PBHL-B 574 and familiarity with concepts and theory of statistical inference. Students who are uncertain about their level of preparation are encouraged to contact the instructor. This course covers the theory of classical and modern approaches to the analysis of clustered data, repeated measures, and longitudinal data. Topics include random effects and growth curve models, generalized estimating equations, statistical analysis of repeated categorical outcomes, and estimation with missing data.

**PBHL-B 670 Topics in Public Health (3 cr.)**

This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-B 698 Advanced Biostatistics Topics (1-3 cr.)**

This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-B 700 Biostatistics Continuous Enrollment (1 cr.)**

P: PBHL-B 701. PBHL-B 700 Environmental Health Continuous Enrollment in a one-credit course designed for MPH students who previously registered for PBHL-B 701 Biostatistics Concentration Project and are working on their Final Concentration Project until project grade has been assigned.

**PBHL-B 711 MS Thesis Research in Biostatistics (3-6 cr.)**

This course will provide students with a culminating experience aimed at integrating their course works in biostatistical methods at MS level and biomedical studies. Through the accomplishment of the learning objectives in biostatistical methods, students will have the

opportunity to practice their biostatistical knowledge and implement them in a real biomedical research project.

**PBHL-B 800 Biostatistics Doctoral Dissertation Research (1-8 cr.)**

The dissertation will be written on an original topic of biostatistics research and presented as one of the final requirements for the PhD degree. The dissertation must be an original contribution to knowledge and of high scholarly merit.

**PBHL-E 517 Fundamentals of Epidemiology (3 cr.)**

This course will introduce students to basic epidemiologic concepts including determinants of health and patterns of disease in populations, population health descriptive techniques, use of health indicators and secondary data sources. Students will gain an understanding of the role of Epidemiology in developing prevention strategies and policy. Among the topics to be covered are measures of mortality and morbidity, design and analysis of observational studies, community health assessment and program evaluation.

**PBHL-E 563 SYSTEMATIC REVIEW AND META-ANALYSIS IN HEALTH SCIENCES (3 cr.)**

This course provides graduate students with an overview of fundamental concepts and methods of systematic review and meta-analysis in health sciences. Principles and methods in conducting a systematic review and meta-analysis are illustrated through case studies of public health and clinical medicine.

**PBHL-E 601 Advanced Epidemiology (3 cr.)**

P: PBHL-E 517 and PBHL-B 551 (or concurrently enrolled). The course focuses on Environmental Health which is the branch of public health that protects against the effects of environmental hazards that can adversely affect health or the ecological balances essential to human health and environmental quality. The environment influences many aspects of human health and well-being. Many diseases are initiated, promoted, sustained, or stimulated by environmental factors. For these reasons, the interactions people have with their environment are an important component of public health.

**PBHL-E 602 Epidemiology Public Health Internship (3 cr.)**

P: MPH Core Curriculum (5 courses); Consent of Faculty Advisor. This course integrates public health theory and practice in a practice setting. Students have the opportunity to apply concepts from core and concentration courses, conduct projects, and interact with a range of health professionals in the designated setting.

**PBHL-E 603 MPH Internship in Public Health Informatics: Applied Practice Experience (1-3 cr.)**

P: MPH Core Curriculum (5 courses); Consent of Faculty Advisor. This course provides an applied practice experience in which students integrate concepts from core and concentration courses, conduct projects, solve problems, gain valuable work experience, and interact with professionals in public health informatics. The student works with the faculty advisor and an academically and professionally qualified preceptor in the agency.

**PBHL-E 606 Grant Writing in Epidemiology (3 cr.)**

The course is open to all graduate students. The course will introduce the grant writing format and process and teach some grantsmanship. Student will have an opportunity to exercise the grant writing process.

**PBHL-E 609 Infections Disease Epidemiology (3 cr.)**

P: E517. This course is designed to provide a basic overview of the infectious disease process, including disease agents, transmission routes, immunity and public health significance. The course introduces principles of infectious disease epidemiology, including outbreak investigation and surveillance, using case studies as examples. Concepts on globalization of disease, microbial ecology, and disease eradication also are discussed.

**PBHL-E 610 Global Chronic Disease Epidemiology (3 cr.)**

P: PBHL-E 517. This course is designed to introduce a wide range of chronic diseases including cancer, cardiovascular disease, obesity and type 2 diabetes from an epidemiologic perspective. The graduate students are expected to learn not only the current knowledge regarding the epidemiology of various chronic diseases, but also the methods of conducting a chronic disease epidemiologic research which will be discussed in the majority of lectures using appropriate examples in terms of both traditional and genetic/molecular epidemiologic approach.

**PBHL-E 618 Global Cancer Epidemiology (3 cr.)**

P: PBHL-E 517. This course is designed to provide an overview of the epidemiology of common cancers, as well as methodologic issues in etiologic research and cancer screening. Emphasis will be placed on risk factors that can be modified for cancer control and prevention.

**PBHL-E 629 Introduction to Genetic Epidemiology (3 cr.)**

P: PBHL-E 517 and PBHL-B 551. This course will introduce students to basic genetic epidemiological concepts, including human genetics, concepts and methodology used in genetic epidemiology. Students will gain an understanding of the role of Genetic Epidemiology in designing and interpreting studies to determine genetic roles in common diseases.

**PBHL-E 635 Foundations in Public Health Informatics (3 cr.)**

This course will introduce the application of Informatics in the Public Health field. The course will include a brief review of core public health functions, describe the current policies defining the use of informatics in public health, and outline the history of the application of informatics principles in both public health and clinical health systems.

**PBHL-E 645 INFORMATION EXCHANGE FOR**

**POPULATION HEALTH (3 cr.)** This course explores the electronic exchange of data, information and knowledge between clinical and public health organizations in support of population health. Students will examine the strategic, organizational, legal, technical, and socio-political aspects of clinical and public health information exchange in the United States and abroad.

**PBHL-E 647 Introduction to Population Health Analytics (3 cr.)**

This course examines the use of analytics and big data in the context of population health within governmental public health agencies as well as health systems. Students will be introduced to a host of methods used to analyze population health data, and gain technical skills required to perform analytics in support of real world use cases.

**PBHL-E 650 Readings in Public Health (1-3 cr.)**

This course is designed to expose the student to published

material on a specific topic or technique in the field of Public Health. The material to be studied will be determined primarily by the student under the direction of a faculty member with input from the student's concentration advisor. The student is expected to work closely with the faculty member to develop a strategy to identify the material to study, plan a time frame for completion of the study and to determine the nature of the study product. Generally the product will be a summary and interpretation of the material studied in a literature review format. The student and faculty member will complete a written agreement, which outlines the scope of work for the semester. This agreement will also be signed by the concentration advisor.

**PBHL-E 666 Overview of Precision Health (3 cr.)**

Introduces the broad overview of current concept.

**PBHL-E 670 Topics in Public Health (1-3 cr.)**

This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-E 675 Fundamentals Injury Epidemiology (3 cr.)**

P: This course is designed for students in the Master of Health Administration and the Master of Public Health degree programs. Students not in one of these two programs must have the permission of the instructor to enroll. All students must have at least a Bachelor's Degree. Injury is the leading cause of death for individuals between the ages of 1 and 44 years. This course will introduce students to basic epidemiologic concepts of injury, both intentional and unintentional. We will discuss the burden of injury and its effect on public health, patterns of injury in populations, the use of descriptive techniques, and secondary data sources. Students will gain an understanding of the role of Injury Epidemiology in developing prevention strategies and policy. Among the topics to be covered are measures of mortality and morbidity, design and analysis of observational studies, community health assessment and program evaluation.

**PBHL-E 700 Epidemiology Continuous Enrollment (1 cr.)**

P: PBHL-E 704. Environmental Health Continuous Enrollment in a one-credit course designed for MPH students who previously registered for PBHL-E 704 Epidemiology Concentration Project and are working on their Final Concentration Project until project grade has been assigned.

**PBHL-E 704 Epidemiology Final Concentration Project (3 cr.)**

P: MPH Core; Public Health Internship. The purpose of this course is to give students the opportunity to synthesize and integrate knowledge acquired through course work and the public health internship. Students prepare a substantial report or paper on their final project and present their findings in a poster format at the conclusion of the course.

**PBHL-E 706 MPH Capstone in Public Health Informatics: Integrated Learning Experience (1-3 cr.)**

P: MPH Core; Public Health Internship. The capstone project, or integrated learning experience (ILE), represents the culminating experience in the MPH Program. Students' ILE must demonstrate synthesis of foundational and concentration competencies in public health

informatics. In consultation with their faculty advisor, students select foundational and concentration-specific competencies appropriate to their educational and professional goals

**PBHL-E 711 APPLIED EPIDEMIOLOGY METHODS (3 cr.)** The purpose of Applied Epidemiology Methods (AEM) is to give graduate epidemiology students the opportunity to gain "hands-on" experience analyzing data to answer a specific research question. Methods and theoretical issues taught in the introductory epi courses. The focus will be on practical analysis issues with actual data.

**PBHL-E 715 Design and Implementation of Observational Studies (3 cr.)** P: PBHL-E 517 and Research Methods. This course examines fundamental aspects of designing and implementing observational epidemiology studies. The focus is on developing strategies to increase the validity of the study results by using techniques to control for possible confounding factors and biases. Topics include sampling methods, sensitivity, data weighting, standardization, selection of cases and controls, matching, data collection and project management.

**PBHL-E 750 Doctoral Topics in Public Health (3 cr.)** Courses offered under this course number would include PhD courses on topics expected to be offered only once, such as those taught by visiting faculty, and those that are newly developed and have not yet been assigned a specific course number. The course will focus on a specific topic or technique related to the field of Public Health. The material to be studied will be determined by the instructor with input from the PhD faculty.

**PBHL-E 751 Doctoral Readings in Epidemiology (1-3 cr.)** This course is designed to expose a PhD student to published material on a specific topic or technique related to their field of study in Epidemiology. The material to be studied will be determined primarily by the PhD student under the direction of a faculty member with input from the student's concentration advisor. The PhD student is expected to work closely with the faculty member to develop a strategy to identify the material to study, plan a time frame for completion of the study and to determine the nature of the study product. Generally the product will be a summary and interpretation of the material studied in a literature review format. The PhD student and faculty member will complete a written agreement, which outlines the scope of work for the semester. The concentration advisor will also sign this agreement.

**PBHL-E 752 Doctoral Studies in Epidemiology (1-3 cr.)** This course is designed to allow PhD students the opportunity to explore research questions by collecting data or using existing data related to their field of study in Epidemiology. The study topic will be determined primarily by the PhD student under the direction of a faculty member with input from the student's concentration advisor. The PhD student is expected to work closely with the faculty member to develop the study protocol, obtain IRB approval if necessary, obtain the data and collect the planned data analysis. The time frame for completion and the nature of the study product will be determined by the PhD student, faculty member and advisor. Generally the product will be a manuscript for submission to an appropriate journal. The PhD student and faculty member

will complete a written agreement, which outlines the scope of work for the semester. The concentration advisor will also sign this agreement.

**PBHL-E 765 Nutritional Epidemiology (3 cr.)** P: PBHL-E 517 and PBHL-B 551. This course provides students with an overview of fundamental concepts and methods of nutritional epidemiology and the current state of knowledge on well-studied associations between diet and chronic diseases. Emphasis will be placed on the design, implementation, analysis, and interpretation of nutritional epidemiologic studies.

**PBHL-E 775 Doctoral Research Seminar in Epidemiology (1 cr.)** This course is designed to expose PhD students to a wide range of specific research topics and issues in Public Health. The seminar topics will be chosen by the Director of the PhD program with input from other faculty members. The PhD students are expected to attend each seminar session, read assigned material, and participate in the seminar discussions. The PhD students may be asked to present their research projects during the seminar to obtain feedback and recommendations from the faculty and other students.

**PBHL-E 780 Pharmacoepidemiology (3 cr.)** P: PBHL-E 517. This is an introductory pharmacoepidemiology course. Students will learn how principles of modern epidemiologic methods are used to evaluate the safety, effectiveness, and utilization patterns of medical products (drugs, vaccines, and medical devices) in human populations, with a focus on observational studies. Related topics, including therapeutic risk management, data sources and ethical principles will be discussed. Advanced methodology, such as that utilized to address confounding by indication and misclassification will be introduced.

**PBHL-E 800 Epidemiology Doctoral Dissertation Research (1-8 cr.)** The dissertation will be written on an original topic of epidemiology research and presented as one of the final requirements for the PhD degree. The dissertation must be an original contribution to knowledge and of high scholarly merit. The candidate's research must reveal critical ability and powers of imagination and synthesis.

**PBHL-H 501 United States Health Care: Systems, Policies and Ethical Challenges (3 cr.)** This course is designed to help students, particularly those interested in careers as public health leaders and health care managers, develop a better understanding of critical health policies and the health policy making process as well as the overall structure and key components of our health care system.

**PBHL-H 507 Management of Individual and Group Behavior (3 cr.)** This course provides a conceptual framework for understanding behavior in the work environment by introducing concepts concerning effective management of people in organizations. Key theories and concepts in the field of organizational behavior will be introduced. The focus of this course is at the micro level of analysis, addressing topics such as individual theories of motivation, job design, and diversity issues; management of work teams; group decision making; managing conflict; and leadership, influence, and power issues.

**PBHL-H 508 Managing Health Care Accounting Information for Decision-Making (3 cr.)** P: PHBL-H 200 or BUS-A 201. Provides a user-oriented understanding of how accounting information should be utilized, focusing on balance sheet and income statement and cash flow analysis, budgeting, cost analysis, and responsibility accounting.

**PBHL-H 509 Health Services Financial Management (3 cr.)** P: PBHL-H 508. The course objective is to provide students with the necessary business skills and tools to function competently in a changing healthcare environment. This course will cover two major sections: accounting fundamentals and financial analysis. Several topics within these sections will be explored with emphasis on problem solving techniques.

**PBHL-H 514 Health Economics (3 cr.)** P: 3 credit hours of undergraduate economics. Examines the principles and application of economic analysis in the health field and the economist's approach to health care issues. Provides insights offered by economic analysis of specific health issues and problems.

**PBHL-H 516 Health Services Delivery and the Law (3 cr.)** Medical-legal concepts related to hospitals and other health services organizations. Course provides an in-depth understanding of the law and the legal processes affecting the health services system. Presentation of the elements of administrative and agency processes, torts, contracts, facilities, physicians, patients, and personnel.

**PBHL-H 518 Statistical Methods for Health Services (3 cr.)** P: 3 credit hours of 300-level undergraduate statistics. Study of the quantitative techniques commonly used to examine health-related data. Includes univariate, bivariate, and multivariate techniques. Emphasis is on using statistical techniques to make policy and administrative decisions in a health services setting. Students use standard computer software to analyze data.

**PBHL-H 521 Management Science for Health Services Administration (3 cr.)** Focus is on management science methods, as applied to health sciences administration. Includes treatment of decision theory, constrained optimization, and probability simulation.

**PBHL-H 523 Health Services Human Resource Management (3 cr.)** This course provides the knowledge and skills needed to understand the application of personnel and labor relations techniques to the health services sectors, with particular emphasis on human resources management, employees' benefit programs, and labor relations as applied to the health services delivery organization.

**PBHL-H 531 Population Health Management and Value-Based Health Insurance (3 cr.)** This course familiarizes students with the rationale, context, and underlying evidence surrounding U.S. health care reimbursement models, including managed care, prospective payment, and value-based purchasing. The population health management framework is then presented as a unifying framework to guide health administrators towards success given new reimbursement models.

**PBHL-H 602 Internship in Health Policy and Management (3 cr.)** P: MPH Core Curriculum; Consent

of Faculty Advisor. This course integrates public health theory and practice in a practice setting. Students have the opportunity to apply concepts from core and concentration courses, conduct projects, and interact with a range of health professionals in the designated setting.

**PBHL-H 603 MPH Internship in Public Health Informatics: Applied Practice Experience (3 cr.)** P: MPH Core Curriculum; Consent of Faculty Advisor. This course provides an applied practice experience in which students integrate concepts from core and concentration courses, conduct projects, solve problems, gain valuable work experience, and interact with professionals in public health informatics. The student works with the faculty advisor and an academically and professionally qualified preceptor in the agency.

**PBHL-H 610 Lean in Healthcare Administration (3 cr.)** A combination of experiential (learn by doing) and lecture formatted learning aimed at introducing students to the concept of Lean thinking and leadership in healthcare organizations. Within the course students will be introduced to: the history of Lean and its rise in healthcare, identification and quantification of the value of waste removal in process oriented work systems, Lean thinking, facilitation, tools and leadership. Students will work independently and in small groups.

**PBHL-H 611 Policy Design, Implementation and Management (3 cr.)** The course will engage students in the examination of the public policy making process, including the politics of health and the implications for the future of health policy in the United States and the world. Health policy topics will be covered from economic, financial, sociological, political and psychological perspectives. Analytical paradigms are applied to organizational or macro-policy making issues. Topics vary by semester according to current policy challenges faced at the federal level.

**PBHL-H 612 Marketing Health Services Delivery (3 cr.)** This course examines the marketing function and the marketing mix; philosophy and principles behind a marketing-driven health service organization; the dynamic healthcare environment; healthcare consumers; marketing research; the promotional mix; and the role marketing management plays in today's health service organization.

**PBHL-H 613 Public Health and Emergency Preparedness (3 cr.)** This graduate elective course is designed for learners to apply emergency preparedness concepts to natural and man-made disasters. The course will also review biological, radiological and chemical terrorism agents. The content will be delivered via, seminar discussion, web-based activities, guest speakers and resource exploration. Public health response to emergency preparedness at local, state and national levels will also be discussed.

**PBHL-H 616 LEADING PUBLIC HEALTH SERVICE ORGANIZATIONS (3 cr.)** This course explores the discipline of management and its major components and functions relating to leading public and private health service organizations. This course will provide students with a foundation of basic management and leadership theory as well as fundamentals, principles, philosophies,

methods and techniques for effective leadership which have particular relevance and application in healthcare.

**PBHL-H 619 Financial Management for Public Health Organizations (3 cr.)** To further develop the student's knowledge of financial management of public health organizations. Topics will include: Financial Statements; Measuring Income; Net Worth and Cash; Break Even Analysis; Cost Allocation; Budgeting for Operations; Analyzing Financial Performance; Time Value of Money; Governmental Accounting and Budgeting Capital Budgeting.

**PBHL-H 621 Grant Writing and Administration for Public Health (3 cr.)** This course explores grants as a source of funding to develop and operate programs to address public health issues. The course is designed to introduce students to the processes for applying for and managing grant funds. The course exposes students to approaches to identifying health issues as a target for grant funding, identifying appropriate grant funding sources, learning about the requirements for applying for a grant, methods for developing a grant for submission, and developing a basic structure for using and managing grant funds to implement the objectives of a grant.

**PBHL-H 623 Health Care Applications of Strategic Management (3 cr.)**

Known as the "Capstone" Course, a final semester course in the MHA Program that utilizes the Capstone Project as the central component of learning for the course. The Capstone Project is a healthcare service organization - sponsored project of significant importance to the sponsor as well as demanding of the student to apply knowledge and skills to a real administrative issue. The Project requires students to utilize a variety of skills including interpersonal, conceptual, critical thinking, report & executive writing, oral presentation, coordination and organization to satisfactorily fulfill the Capstone Project requirements. Guest lecturers in healthcare executive roles are invited to share administrative and leadership challenges, strategic management issues and experiences, and operating challenges from the health services field. Guest lecturers provide valuable insight to facilitate the transition from the academic setting to the health care industry work place. The class will also emphasize the development of personal leadership philosophies and principles. The development of a personal set of leadership philosophies and principles is designed to help prepare the students for early career success and to set a foundation for professional growth and development.

**PBHL-H 624 Developing Strategic Capability (3 cr.)**

This course aims to develop the student's knowledge and ability in strategic management in health services organizations. Based on an introduction to the general process model of strategic management, the course will engage in detailed discussions of a series of topics in strategic management. These topics include the identification of the organization's mission, vision, and values, the analysis of the external and internal environment of the organization, the identification of strategic challenges and opportunities, the development of strategies, the evaluation of strategies, the communication of strategies, and the development and evaluation of an action plan.

The course emphasizes the unique strategic challenges facing health services organizations and their leadership, and aims to develop accordingly the student's ability to identify, analyze and address these challenges.

The course utilizes lectures, group discussion, and real-life case studies to facilitate the understanding of basic course content and the conceptual model of strategic management. Students will also be required to analyze a strategic case and apply the conceptual strategic planning process.

**PBHL-H 628 Health Care Information Systems (3 cr.)**

This course introduces the management of healthcare information systems. Topics include analyzing system requirements, system design and evaluation, selecting computer resources, and managing the implementation process.

**PBHL-H 639 Law Poverty and Population Health (3 cr.)**

Public health law is law that affects the health conditions of populations. In the United States, this contrasts with medical law or general health law, which focus more on the health-care delivery system and physician-patient relationships.

**PBHL-H 641 Ethics and Public Health (3 cr.)**

This course is an introduction to the role of ethics in population health-related programs, policymaking, professions and research.

**PBHL-H 644 Health Impact Assessment (3 cr.)**

The goal of this course is to introduce students to the theoretical and practical aspects of health impact assessment (HIA) as a methodological tool in public health. HIA utilizes a variety of qualitative and quantitative methods and tools, designed to assess the potential health effects of a public policy, program, project, or initiative. While HIA is still an emerging practice in the United States, in Europe, Canada, and other areas of the world, the assessment of the public health impact of public decisions have been performed regularly to support policy decisions and promote conditions required for optimal health. During the first part of the semester, students will learn the necessary steps to conduct an HIA, review national and international case studies, and discuss how findings may or may not impact policy making. During the second half of the course, students will work in teams with a local or state health department to examine the potential health impact of policy proposals in Indiana.

**PBHL-H 645 Introduction to Leadership and Professional Development (3 cr.)**

Through multiple interactions with a variety of healthcare leaders, readings, and field experiences, entering MHA students broaden their understanding of the various components that comprise our healthcare system. In addition, learners will self-assess their competencies, reflect on their learning, with a focus on creating a Professional Development Plan.

**PBHL-H 646 Operations Management for Health Administration (3 cr.)**

Best practices for operationalizing strategy in healthcare organizations including: goal setting; measuring, monitoring, and controlling organizational performance; organizational design; change management;

quality management and safety' process improvement; and value based care.

#### **PBHL-H 650 Readings in Public Health (1-3 cr.)**

This course is designed to expose the student to published material on a specific topic or technique in the field of Public Health. The material to be studied will be determined primarily by the student under the direction of a faculty member with input from the student's concentration advisor. The student is expected to work closely with the faculty member to develop a strategy to identify the material to study, plan a time frame for completion of the study and to determine the nature of the study product. Generally the product will be a summary and interpretation of the material studied in a literature review format. The student and faculty member will complete a written agreement, which outlines the scope of work for the semester. This agreement will also be signed by the concentration advisor.

#### **PBHL-H 657 Application of Cost-Effectiveness Analysis in Public Health (3 cr.)**

Cost-effectiveness analysis is widely used in evaluating the performance of public health programs and policies. In this course, students will learn to frame the conceptual model, to collect and synthesize data regarding "cost" and "effectiveness," to perform a "cost-effectiveness" to perform a cost-effectiveness analysis, and to form recommendations based on the analysis.

#### **PBHL-H 658 RESEARCH CONCEPTS IN HEALTH POLICY AND MANAGEMENT (3 cr.)**

P: Students should complete all the core courses before taking this class. This course examines fundamental research methods used in the field of public health. The focus is on understanding how community in scientifically valid methods and how study results in daily fairly interpreted.

**PBHL-H 670 Topics in Public Health: (1-6 cr.)** P: PBHL-H 705. This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

#### **PBHL-H 700 Health Policy and Management**

**Continuous Enrollment (1 cr.)** P: PBHL-H 705. This is a one-credit course designed for MPH students who previously registered for PBHL-H 705 Health Policy and Management Concentration Project and are working on their Final Concentration Project until project grade has been assigned.

#### **PBHL-H 702 Internship in Health Services**

**Management (3 cr.)** P: Requires the equivalent of a minimum of 3 credit hours of on-site experience under the supervision of a qualified preceptor and program faculty. Grading is on an S/F basis. The Internship is a learning experience will assist students/future as health care executives with the development of their leadership philosophy and style, as well as understanding the complex problems and challenges associated with planning, organizing, managing, leading, financing and evaluating the delivery of health services in numerous settings.

#### **PBHL-H 705 Health Policy and Management Final Concentration Project (3 cr.)**

P: MPH Core; Public Health Internship. The purpose of this course is to give

students the opportunity to synthesize and integrate knowledge acquired through course work and the public health internship. Students prepare a substantial report or paper on their final project and present their findings in a poster format at the conclusion of the course.

#### **PBHL-H 706 MPH Capstone in Public Health Informatics: Integrated Learning Experience (3 cr.)**

P: MPH Core; Public Health Internship.

The capstone project, or integrated learning experience (ILE), represents the culminating experience in the MPH Program. Students' ILE must demonstrate synthesis of foundational and concentration competencies in public health informatics. In consultation with their faculty advisor, students select foundational and concentration-specific competencies appropriate to their educational and professional goals.

#### **PBHL-H 711 Capstone Experience for Health Policy and Management (3 cr.)**

P: PBHL-H 602: Please contact Sarah Johnson shm@indiana.edu for authorization to register. This course will provide students with a culminating experience aimed at integrating their learning throughout the MPH program. Students will determine their proficiency in public health through the development of an ePortfolio, and engaging in professional development through various activities and presentations to prepare them for professional life.

#### **PBHL-H 747 Health Policy and Management Research Seminar (12 cr.)**

The objective of this course is for students learn how and practice critically appraising, developing, and defending research studies related to Health Policy and Management. These are broad skills that should continuously be improved throughout students' time in a PhD program. Therefore, this course is designed to be taken repeatedly so that students at different stages of their PhD studies can continue to develop their skills.

The course will be taught seminar style, meaning that class sessions will often consist of roundtable discussions of published and proposed research studies. In these discussions, students are expected to participate heavily and to drive much of the discussion.

#### **PBHL-H 751 Doctoral Readings in Health Policy and Management (1-3 cr.)**

This course is designed to expose a PhD student to published material on a specific topic or technique related to their field of study in Health Policy and Management. The material to be studied will be determined primarily by the PhD student under the direction of a faculty member with input from the student's concentration advisor. The PhD student is expected to work closely with the faculty member to develop a strategy to identify the material to study, plan a time frame for completion of the study and to determine the nature of the study product. Generally the product will be a summary and interpretation of the material studied in a literature review format. The PhD student and faculty member will complete a written agreement, which outlines the scope of work for the semester. The concentration advisor will also sign this agreement.

#### **PBHL-H 752 Doctoral Readings in Health Policy and Management (1-3 cr.)**

This course is designed to allow PhD students the opportunity to explore research questions by collecting data or using existing data related to their field of study in Health Policy and Management. The study topic will be determined primarily by the PhD

student under the direction of a faculty member with input from the student's concentration advisor. The PhD student is expected to work closely with the faculty member to develop the study protocol, obtain IRB approval if necessary, obtain the data and collect the planned data analysis. The time frame for completion and the nature of the study product will be determined by the PhD student, faculty member and advisor. Generally the product will be a manuscript for submission to an appropriate journal. The PhD student and faculty member will complete a written agreement, which outlines the scope of work for the semester. The concentration advisor will also sign this agreement.

**PBHL-H 775 Doctoral Research Seminar in Health Policy and Management (1-3 cr.)** This course is designed to expose PhD students to a wide range of specific research topics and issues in Public Health. The seminar topics will be chosen by the Director of the PhD program with input from other faculty members. The PhD students are expected to attend each seminar session, read assigned material, and participate in the seminar discussions. The PhD students may be asked to present their research projects during the seminar to obtain feedback and recommendations from the faculty and other students.

**PBHL-H 781 Research Designs in Health Policy & Management (3 cr.)** This course exposes PhD students to research designs used in health policy and management literature. Topics covered include types of study designs including their benefits and drawbacks with a strong focus on causal inference. Students will gain an improved grasp of the interdisciplinary language of HPM research.

**PBHL-H 782 Health Services Empirical Methods (3 cr.)** The course will review quantitative methods useful to health services research, the emphasis will be on the practical application of such methods, including issues related to data management, the use of different software packages to implement such methods, and the effective presentation of quantitative findings to a variety of audiences.

**PBHL-H 783 Qualitative Methods in Health Services Research (3 cr.)** This is a qualitative research methods course for doctoral students. Emphasis will be placed on ethnographic field methods as they apply to understanding the organization, implementation, and evaluation of health services. Students will: learn qualitative research design; collect, manage, and analyze qualitative data; and report qualitative findings.

**PBHL-H 786 Healthcare Organizations Research (3 cr.)** This seminar is the introductory seminar for HPM doctoral students and should be taken in the first or second year of your graduate study. The broad goal of the course is to help you develop your skills in analytic reasoning, critical thinking, knowledge translation, and professional self-reflection necessary for a successful research career.

**PBHL-H 799 Dissertation Proposal for Health Policy & Management (4 cr.)** This course will provide students with time to prepare for the qualifying examination and prepare

their dissertation prospectus. The prospectus includes the information required by the IUPUI Graduate Office.

**PBHL-H 800 Doctoral Level Directed Studies (1-12-12 cr.)** The dissertation will be written on an original topic of research and presented as one of the final requirements for the PhD degree. The dissertation must be an original contribution to knowledge and of high scholarly merit. The candidate's research must reveal critical ability and powers of imagination and synthesis. The dissertation is written under the supervision of a research director and a research committee. The data used by the student may involve analysis of primary or secondary data.

**PBHL-H 805 Doctoral Dissertation (3 cr.)** Students work independently, in collaboration with dissertation committee chairs and committee members, to complete dissertations. The DrPH dissertation is the ultimate academic test of a student's competency. It requires application of key aspects of the curriculum to improving the understanding of an important public health-related administrative or policy issue.

**PBHL-P 500 Social and Behavioral Science in Public Health (3 cr.)** This course is designed to introduce students to the social and behavioral science principles that provide the foundation for health program planning and disease prevention with an emphasis on population-based public health approaches. Students will explore topics that promote a broader and better understanding of determinants of health; the multiple factors contributing to health and illness behaviors; and the fundamentals, theories and principles that shed light on health and illness behaviors.

**PBHL-P 504 U.S. Health Care Systems and Health Policy (3 cr.)** This course examines the U.S. health care and public health systems including the structure, components, and financing of these systems. Ethical concepts, policy making, implementation, and impacts of major health care and public health policies will be discussed.

**PBHL-P 506 POPULATION AND PUBLIC HEALTH (3 cr.)** The management of the health of a population requires attention to the multiple determinants of health including: medical care, public health, and the environment. As a key component of population health, this course provides a broad introduction to the principles and organization of public health.

**PBHL-P 510 Introduction to Public Health (3 cr.)** Students will learn the basic foundations and disciplines of public health. Explore the public health impact where populations live, work and play will be covered. Students will develop tools to examine issues and create solutions through a public health lens.

**PBHL-P 511 Comprehensive Methods & Applications in Biostatistics and Epidemiology (3 cr.)** This course provides an introduction to concepts of epidemiology and principles of biostatistical methods using software applications such as Excel, Dedoose and SPSS. Students will discover how to answer complex questions through



both quantitative and qualitative methods that can shape public health policy, programs, and interventions.

**PBHL-P 512 Communication and Leadership in Public Health (3 cr.)** P: PBHL-P 510 and PBHL-P 511 Explores fundamental concepts of leadership, communication, and advocacy and applies them to public health challenges.

Introduces advanced professional leadership skills, such that learners will be able to adapt interventions effectively within the organizational, social, and political environments. Develops inter-personal communication skills including: presentations, interviewing, conflict management, negotiation and risk communication.

**PBHL-P 513 Planning, Evaluation and Management in Public Health (3 cr.)** P: PBHL-P 510 and PBHL-P 511 Explore methodologies to identify community health priorities and inequities. Utilize scientifically sound methods to design culturally appropriate programs and policies to address those needs. Identify and incorporate evaluation strategies to improve quality and effectiveness of programs and policies. Strengthen management systems to improve efficiency.

**PBHL-P 517 Fundamentals of Epidemiology (3 cr.)** This course will introduce students to basic epidemiologic concepts, including determinants of health and patterns of disease in populations, population health descriptive techniques, use of health indicators, and secondary data sources. Students will gain an understanding of the role of epidemiology in developing prevention strategies and policy. Among the topics to be covered are measures of mortality and morbidity, design and analysis of observational studies, community health assessment, and program evaluation.

**PBHL-P 519 Environmental Science in Public Health (3 cr.)**

The course focuses on environmental health, which is the branch of public health that protects against the effects of environmental hazards that can adversely affect health or the ecological balances essential to human health and environmental quality. The environment influences many aspects of human health and well-being. Many diseases are initiated, promoted, sustained, or stimulated by environmental factors. For these reasons, the interactions people have with their environment are an important component of public health.

**PBHL-P 551 Biostatistics for Public Health I (3 cr.)**

This course introduces the basic principles and methods of data analysis in public health biostatistics. Emphasis is placed on public health examples as they relate to concepts such as sampling, study design, descriptive statistics, probability, statistical distributions, estimation, hypothesis testing, chi-square tests, t-tests, analysis of variance, linear regression, and correlation.

**PBHL-P 602 Public Health Internship (3 cr.)**

This course integrates public health theory and practice in a practice setting. Students have the opportunity to apply concepts from core and concentration courses, conduct projects, and interact with a range of health professionals. Students work both with a faculty advisor and qualified preceptor in the agency.

**PBHL-P 650 Readings in Public Health (3 cr.)**

This course is designed to expose the student to published material on a specific topic or technique in the field of public health. The material to be studied will be determined primarily by the student under the direction of a faculty member with input from the student's concentration advisor. The student is expected to work closely with the faculty member to develop a strategy to identify the material to study, plan a time frame for completion of the study, and to determine the nature of the study product. Generally, the product will be a summary and interpretation of the material studied in a literature review format. The student and faculty member will complete a written agreement, which outlines the scope of work for the semester. This agreement will also be signed by the concentration advisor.

**PBHL-P 670 Topics in Public Health (3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-P 700 Concentration Project Completion (3 cr.)** Continuous enrollment in a one-credit course designed for MPH students who have completed all MPH requirements except the final concentration project are required to enroll in P700 no more than four times.

**PBHL-S 510 Introduction to Research Methods in Public Health (3 cr.)** This course examines fundamental research methods used in the field of public health. The focus is on understanding how community and clinical data are collected in scientifically valid methods and how study results are fairly interpreted. Students will learn how to critique published research to identify the strengths and limitations of the designs and approaches used, along with possible confounding factors and biases. Topics include components of research studies, including: justification for a research project, development of research questions, research designs (qualitative, quantitative), selection of participants, sampling methods, project management, and data for analysis. Methods used to complete and interpret community-based needs assessments and program evaluation will be included.

**PBHL-S 602 Internship in Social and Behavioral Science (3 cr.)** P: MPH Core Curriculum (5 courses); Consent of Faculty Advisor. This course integrates public health theory and practice in a practice setting. Students have the opportunity to apply concepts from core and concentration courses, conduct projects, and interact with a range of health professionals in the designated setting. Linked to the student's chosen concentration, this work experience exposes the student to new issues and new ways to solve problems and offers the student an opportunity to gain work experience in his/her concentration major and, at the same time, provides valuable job skills. The student works both with a faculty advisor and an academically and professionally qualified preceptor in the agency.

**PBHL-S 605 Public Health Biology (1 cr.)** Students will gain foundational knowledge of the biological basis of select leading public health issues, and practice in communicating the intersection of biology and public health promotion strategies. Topics will include at least

one example of a(n) chronic disease, infectious disease, maternal and child health issue, and mental health condition.

**PBHL-S 615 Public Health Qualitative Methods (3 cr.)** This course provides an introduction to qualitative research methods. Students will learn about and gain applied experience in qualitative data collection approaches, including interviews and observations. Students will also learn about and apply qualitative data analysis skills, as well as learn techniques for effectively summarizing and presenting qualitative research results.

**PBHL-S 617 Health Promotion and Disease Prevention (HP/DP) (3 cr.)** Health promotion and disease prevention are important in improving a nation's health. This course will provide an in-depth analysis of key foundational concepts of health promotion to include: advocacy, health communication strategies, and using evidence and theory to select health promotion programs across settings.

**PBHL-S 619 Health Disparities and Health Equity (3 cr.)** This course will provide a broad overview of health disparities. Specifically, this comprehensive course will focus on helping to students to 1) understand what health disparities are and to critically analyze why they exist, and 2) learn about multi-level and evidence-based strategies that are utilized to effectively address health disparities.

**PBHL-S 620 Stress and Population Health: A Biopsychosocial Exploration (3 cr.)** This course will examine stress holistically, i.e. from a biological/physiological, psychological and sociological perspective. You will learn how stress is manifested psychologically as well as in the systems of the body. You will also examine stress from a community/population perspective. Finally, the effects of stress on the body will be examined through examples from its role as a cause of and contributor to major illnesses.

**PBHL-S 622 Coaching for Health Behavior Change (3 cr.)** This course is designed to teach students how to coach individuals and groups attempting to improve their health behaviors. Theory, evidence-based practices, and different types of communication and interviewing styles will be explored through hands-on activities. Students will practice the learned techniques throughout the semester and will be able to apply these techniques upon completion of the course. Health educators, health educator trainers, health care providers, and others interested in guiding behavior change will benefit from this course.

**PBHL-S 625 Applied Public Health Campaigns and Social Marketing Strategies (3 cr.)** Effectively communicating public health messages can be a challenge. From advertising a program to promoting behavior change, there are many social marketing strategies and tools that yield positive results. This course will offer students practical opportunities to apply these strategies and tools in the development and evaluation of public health campaigns. Case studies, guest speakers, and hands-on experiences will be incorporated in this class.

**PBHL-S 630 Global Maternal Health (3 cr.)** The impact of global maternal and child health (MCH) conditions at different stages of the life cycle, and their functional biopsychosocial outcomes will be explored. Students will

explore the different contexts that influence global MCH as well as intervention and policy strategies that optimize MCH.

**PBHL-S 631 Maternal, Child, and Family Health (3 cr.)** This course is designed to give students an overview of the social, economic and environmental issues currently affecting the health of women of reproductive age, infants and children. Focus will be placed on the maternal-fetal period with an examination of the complex interplay between the biologic, behavioral, psychological and social factors that affect health status and reproductive outcomes.

**PBHL-S 635 A Biosocial Approach to Global Health (3 cr.)** This course examines community capacity building in foreign nations. Students will learn a social justice perspective of global health and global community engagement strategies and grow their skill base by planning programs in a foreign country that align with the UN Sustainable Development Goals.

**PBHL-S 640 Culture and Health (3 cr.)** In this course we will examine what is meant by culture, the ways in which culture intersects with health issues, and how public health efforts (domestic and global) can benefit by understanding and working with cultural processes.

**PBHL-S 650 Readings in Public Health (1-3 cr.)** This course is designed to expose the student to published material on a specific topic or technique in the field of Public Health. The material to be studied will be determined primarily by the student under the direction of a faculty member with input from the student's concentration advisor. The student is expected to work closely with the faculty member to develop a strategy to identify the material to study, plan a time frame for completion of the study and to determine the nature of the study product. Generally the product will be a summary and interpretation of the material studied in a literature review format. The student and faculty member will complete a written agreement, which outlines the scope of work for the semester. This agreement will also be signed by the concentration advisor.

**PBHL-S 660 Community Capacity Building in a Global Health Context (3 cr.)** This course examines strategies to build the capacity of communities, in foreign nations, to address their priority health and social issues. The course will present students with social justice perspective of global health and global community engagement strategies. This foundational knowledge will be coupled with practical experience in working with global partners to develop a strategic plan that addresses community health issues. Students will grow their knowledge base about program planning, community engagement, social determinants, and culture by learning how to plan programs in a foreign country that align with the UN Sustainable Development Goals. Student will work in teams consisting undergraduate and graduate public health student and global partners. Collectively the team will create a strategic plan to address an identified community health issue, with MPH students also creating a white paper that proposes a solution strategy to diminish poverty in the target community. The course will require student to engage in analytical reading and discussions, and produce and deliver impactful written and oral communications.

**PBHL-S 662 Integrated Learning Experience 1 Advanced Program Planning (3 cr.)** This hybrid in-class and web-based course will provide students with a systematic approach to prioritizing, planning and evaluating health programs. Students will work with community partners to develop and evidence-based health promotion program that addresses a public health that is a priority for their organization.

**PBHL-S 664 ILE2: Research Methods and Program (3 cr.)** This course examines fundamental research methods used in the area of program evaluation in public health. The focus is on understanding how to collect, analyze, and interpret data on public programs using scientifically valid methods.

**PBHL-S 670 Topics in Public Health (1-3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-S 700 Social and Behavioral Health Science Continuous Enrollment (1 cr.)** P: PBHL-S 702. This is a one-credit course designed for MPH students who previously registered for B701 Biostatistics Concentration Project and are working on their Final Concentration Project until project grade has been assign.

**PBHL-S 702 Social and Behavioral Science Final Concentration Project (3 cr.)** P: MPH Core; Public Health Internship. The purpose of this course is to give students the opportunity to synthesize and integrate knowledge acquired through course work and the public health internship. Students prepare a substantial report or paper on their final project and present their findings in a poster format at the conclusion of the course.

**PBHL-S 711 Capstone Experience in Social and Behavioral Sciences in Public Health (3 cr.)** P: PBHL-S 602: Please contact Sarah Johnson shm@indiana.edu for authorization to register. This course will provide students with a culminating experience aimed at integrating their learning throughout the MPH program. Through the accomplishment of the learning objectives, students will have the opportunity to practice public health through the resolution of public health problems; determine their proficiency in public health through the development of an ePortfolio, and engage in professional development through various activities and presentations to prepare them for professional life.

**PBHL-S 725 Preparing for Academia in Public Health (1 cr.)** This 1.0 credit seminar course will prepare advanced graduate students for the roles and responsibilities they may assume as faculty members. Course content will include an overview of the higher education culture and faculty expectations for teaching, research and service.

## Courses

The abbreviation "P" refers to course prerequisites and "R" to recommended prerequisite courses. Prerequisites can be waived by the instructor of the course. The number of hours of credit is indicated in parentheses following the course title. Courses are listed in groups: global health,

biostatistics, epidemiology, health services management, public health and social and behavioral science.

### Graduate Courses

**PBHL-A 602 Internship in Environmental Health Science (3 cr.)** P: MPH Core Curriculum (5 courses); Consent of Faculty Advisor. This course integrates public health theory and practice in a practice setting. Students have the opportunity to apply concepts from core and concentration courses, conduct projects, and interact with a range of health professionals in the designated setting. Linked to the student's chosen concentration, this work experience exposes the student to new issues and new ways to solve problems and offers the student an opportunity to gain work experience in his/her concentration major and, at the same time, provides valuable job skills. The student works both with a faculty advisor and an academically and professionally qualified preceptor in the agency.

**PBHL-A 617 ENVIRONMENTAL EPIDEMIOLOGY (3 cr.)** The course will introduce epidemiological studies of environmental/occupational agents, focusing on study design, biases, and methodological tools used to evaluate and extend the evidence linking exposures to human diseases. We will discuss applications, strengths, and limitations of different study designs and their use in studying specific environmental agents.

### PBHL-A 623 MANAGEMENT AND LEADERSHIP IN HEALTH PROTECTION (3 cr.)

Explores concepts to integrate the expertise and efforts of health protection professionals into a broader organization/workplace to influence strategy and create impact. We will examine discipline-specific elements of management systems, establish professional skills, and navigate work situations and effective communication strategies for health protection.

### PBHL-A 633 Occupational Health and Safety for Public Health Professionals (3 cr.)

Each year, thousands of workers throughout the world are killed, injured, or otherwise adversely affected by chemical, biological, and/or physical, agents encountered in the workplace. Common hazards include dusts, gases and vapors, bio-aerosols, pathogens, noise, and ionizing and non-ionizing radiation. Ergonomic stresses and safety hazards are also important causes of workplace morbidity and mortality. The goal of this course is to educate individuals to anticipate, recognize, evaluate, control, and manage such workplace health risks.

This course is a survey of the technical and regulatory aspects of protecting the health and safety of workers. Topics include basic toxicology; skin, eye, and respiratory hazards; measuring hazardous atmospheres; ventilation systems; fire and explosion hazards; emergency response; noise-induced hearing loss in the workplace; radiation; accident prevention; cumulative trauma; and personal protective equipment. The course provides students with an introduction to the principles and practice of industrial hygiene. Industrial hygiene is concerned with the anticipation, recognition, evaluation and control of environmental and occupational factors that pose hazards to health and safety in the workplace. These aspects parallel the basic components of risk assessment: hazard identification, dose-response determination, exposure

assessment, risk assessment, and risk management. Greater attention is focused on anticipation, recognition, and evaluation, but some consideration of control methods and hazard communication will also be included. These functions all require a sound understanding of basic toxicology, procedures for investigation, methods of exposure measurement and assessment, behavior of chemical and physical agents in the environment, and the application of guidelines and standards, topics which form the primary elements of the course.

**PBHL-A 640 Public Health Applications of GIS (3 cr.)**

Using ArcGIS Desktop software, this course aims to familiarize students with applications of Geographic Information Systems (GIS) in the context of public health. Public Health cases will be used to explain and teach principles, methods, and techniques. Topics include creating layer packages in ArcMap, health data visualization, map design, health data downloading, geocoding tabular data, and spatial analysis and spatial joins.

**PBHL-A 641 Introduction to Global Health and Sustainable Development (3 cr.)**

Cycles of instability, conflict, and ineffective governance impede sustainable development, thereby limiting advances in preventable disease, injury, and death. In this course, we will explore the global landscape of morbidity and mortality, its connectedness to security and prosperity, and the investments and partnerships needed to ensure sustainable development, health, and well-being.

**PBHL-A 642 Poverty, Decent Work, and Inequality (3 cr.)**

Eradicating poverty is fundamental for the health of the global population, sustainable development, and achieving health equity. In this course we will analyze the connected systems of decent work, social protection, and education, and propose strategies and roles for public health professionals to reduce inequality and foment health-sustainable systems.

**PBHL-A 643 Water and Sanitation (3 cr.)** The availability of safe drinking water and basic sanitation systems are barriers to development and health. We will examine the current state of the fundamental and related problems, the global public health impact, subsequent impediments to development, and solutions to overcome these barriers.

**PBHL-A 644 Sustainable Production and Consumption (3 cr.)**

Parallel challenges of both over- and under-consumption tax our natural resources, including food supplies, dirty our environments, and hinder sustainable development and public health globally. This course will assess over- and under-consumption as interrelated systems problems, and analyze both structural and individual changes in support of healthy consumption and production.

**PBHL-A 645 Resilient Cities and Communities (3 cr.)**

Unprecedented migration to urban centers, and subsequent concentration of extreme poverty, impedes sustainable development. This is further complicated by the impact of climate change on infrastructure. We will explore the public health principles that help ensure safe, health promoting, and sustainable cities and communities.

**PBHL-A 646 Preservation and Restoration of Land and Sea (3 cr.)**

Overfishing and pollution of the world's oceans

and fresh water systems, along with land degradation and deforestation, continue at alarming levels. We will assess the current state of the natural environment, its impact on public health and development, and explore paths toward restoration and protection of land, coastal, and marine ecosystems.

**PBHL-A 650 Readings in Public Health (1-3 cr.)**

This course is designed to expose the student to published material on a specific topic or technique in the field of Public Health. The material to be studied will be determined primarily by the student under the direction of a faculty member with input from the student's concentration advisor. The student is expected to work closely with the faculty member to develop a strategy to identify the material to study, plan a time frame for completion of the study and to determine the nature of the study product. Generally the product will be a summary and interpretation of the material studied in a literature review format. The student and faculty member will complete a written agreement, which outlines the scope of work for the semester. This agreement will also be signed by the concentration advisor.

**PBHL-A 661 Fundamentals of Toxicology (3 cr.)**

P: PBHL-A 609. This class will give students a solid introduction to toxicology and the ways in which environmental exposures can contribute to human disease. The course will also introduce the regulatory settings in which environmental toxicology is key.

**PBHL-A 662 Human Health Risk Assessment (3 cr.)**

Human Health Risk Assessment is the basis for making decisions related to human health. This course will examine the basic principles and methods of conducting human health risk assessments and how risk is managed and communicated to the public. Applications emphasizing real scenario will be used to illustrate the interdisciplinary process and products of risk assessment, as well as the regulatory use of the information.

**PBHL-A 670 Topics in Public Health (1-3 cr.)**

This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-A 675 Regulatory Affairs for Product Stewardship (3 cr.)**

This course explores the major national and international legislative, regulatory, and voluntary frameworks that impact manufacturing, importing, and placing products into commerce, and aspects for compliance management for businesses.

**PBHL-A 676 Product Stewardship Strategy and Management (3 cr.)**

This course explores how businesses asset and attain overarching goals by integrating risk assessments, regulatory, and other considerations.

**PBHL-A 677 Product Hazard, Exposure & Risk Assessment (3 cr.)**

Examines product hazards against probable and misuse exposure scenarios that translate into a risk assessment. Explores a framework to assess risk throughout the product supply chain to determine and document appropriate

and effective systems for ongoing assessment and management of product and business risk.

**PBHL-A 678 Product Improvement and Sustainability (3 cr.)** Presents best practices in product design, focusing on materials selection, packaging and sustainability.

Examines alternatives in the product development cycle where improvement opportunities exist to reduce potential impact on human and environmental health while providing comparable or superior efficacy, and competitive advantage to business.

**PBHL-A 680 Fundamentals of Product Stewardship (3 cr.)** Throughout a product's lifecycle, environmental, health, safety, and societal issues must be successfully managed to protect the public and environment while maximizing a company's economic value. A holistic approach to sound, disciplined Product Stewardship competencies will be provided, and applied through case-based learning

**PBHL-A 700 Environmental Health Continuous Enrollment (1 cr.)** P: PBHL-A 703. This course is a one-credit course designed for MPH students who previously registered for PBHL-A 703 Environmental Health Concentration Project and are working on their Final Concentration Project until project grade has been assigned.

**PBHL-A 703 Environmental Science Final Concentration Project (3 cr.)** P: MPH Core; Public Health Internship. This course provides students the opportunity to synthesize and integrate knowledge acquired through course work and the public health internship by conducting an environment health study or assessment. Student projects will include components of environmental health research and application.

**PBHL-A 755 ORGANIZATIONAL LEADERSHIP THEORY AND PRACTICE (2 cr.)** This course provides an overview of the theoretical framework for organizational leadership in field settings. We will focus on specific leadership topics such as team leadership, change and innovation processes. Special emphasis will be placed on leadership styles and the relevance of context and geographic location in the world.

**PBHL-A 756 LEADERSHIP IN GLOBAL HEALTH LAW AND ETHICS (2 cr.)** Overview of critical issues relating to law, ethics, and global public health, including legal foundations of the American public health system and ethical dilemmas. We compare and contrast the American perspective with those of other countries and governance structures.

**PBHL-A 757 A POPULATION PERSPECTIVE FOR GLOBAL HEALTH (1 cr.)** This course is designed to enable learners to understand what "population health" means in the context of contemporary politics and public health. The course provides learners with a basic familiarity of the use of epidemiology and aggregate measures in political and policy contexts.

**PBHL-A 758 INITIATING THE RESEARCH PROCESS (1 cr.)** This course is designed to enable learners to understand what "population health" means in the context of contemporary politics and public health. The course provides learners with a basic familiarity of the use of

epidemiology and aggregate measures in political and policy contexts.

**PBHL-A 759 Leadership in Global Health Systems (2 cr.)**

Critical examination of current issues in global health systems prepares students to confront organizational and policy challenges. Examine trends in global health reforms and governing structures. Explore leadership expectations of diverse stakeholders, inside and outside government, and how they may be met with critical thinking, analysis, and application.

**PBHL-A 760 Essentials of Practice-Based Research (2 cr.)**

Review basic research techniques used in health services research, including qualitative and quantitative methods. Special emphasis is placed on applying these skills in "real world" settings where data may not be perfect and conditions may make it necessary to compromise in applying research techniques used in more controlled settings.

**PBHL-A 761 Literature Review and Appraisal (2 cr.)**

This course introduces methods for identifying, exploring and evaluating literature relevant to students' proposed dissertation topics in a scholarly and systematic way. The course also prepares students to effectively review research for decision-making and other applications in their roles as senior leaders in organizations.

**PBHL-A 762 The Science of Global Health Implementation (2 cr.)** This course provides students with an introduction to the topic of implementation science including immediately applicable problem solving and analytical skills relevant to those working in global public health settings. The course introduces a suite of tools for each step of the implementation framework, allowing students to understand the suitability of different tools for different applications.

**PBHL-A 763 Leadership Challenges in Global Health Informatics (2 cr.)**

This course provides students with insights into timely issues relating to global health informatics. The course helps students understand current global challenges and opportunities in health informatics and equips them with the skills and knowledge they need to effectively identify and address information needs in organizations.

**PBHL-A 765 Financing Global Health (2 cr.)**

The course will focus on how development assistance for health (DAH) is changing and implications for the public's health. Students will discuss global health related financial goals and priorities. They will become acquainted with principles of political economy and the structures and governance of financing institutions related to DAH worldwide.

**PBHL-A 766 FUNDAMENTALS OF RESEARCH ANALYSIS (3 cr.)** Students refine their methodology, increasing their understanding of how specifically to implement it, including how to manage and organize data and how to present the data results. This course emphasizes collection of primary data through

questionnaires or surveys, focus groups and key informant interviews.

**PBHL-A 767 Executive Communication for Global Health Leaders (2 cr.)** Media for communication include traditional outlets as well as new and emerging electronic media. Sensitivity to timing, context, culture, and best practices can maximize the effectiveness of executive communication within and outside their own organizations. This course introduces topics in executive communication necessary for senior leaders to be effective.

**PBHL-A 768 Global Health Policy and Advocacy (2 cr.)** Review frameworks for global policy processes then take an in-depth look at one approach and its basic steps, applying it to select cases. The course considers key concepts in development of an advocacy agenda using strategies tailored to the policy environment and designed to move policies in the desired direction.

**PBHL-A 769 Strategic Theory and Practice in Global Health Leadership (2 cr.)**

This course focuses on theories and principles of strategic leadership of organizations with a mandate to provide health care services. Coursework will address such strategic leadership issues as a basis for ensuring resource efficiency and effective operations. The course also addresses strategic challenges relevant in a global context.

**PBHL-A 770 Marketing and Public Relations for Global Health Leaders (2 cr.)**

Senior leaders must be aware of key concepts in marketing and PR. Fundraising efforts must be supported by organizational leaders to advance the interests of the organization and serve the public good. This course provides insights into executive competencies related to external relationships influenced through marketing, PR and organizational development.

**PBHL-A 771 Program Evaluation for Global Health Leaders (2 cr.)**

Review key evaluation theories and frameworks, selection of evaluation questions, evaluation design and data collection strategies, reporting evaluation results, and the political, ethical, and interpersonal considerations in evaluation. Some topics, including research design and data collection strategies, reinforce previous course content.

**PBHL-A 777 Dissertation Planning and Preparation I (1-2 cr.)**

This course guides students through the steps necessary to produce the outline of a dissertation proposal. In collaboration with faculty, students will assess the current state of their research questions and literature reviews and generate work plans for revisions, additional refinements and the addition of preliminary ideas about methodology.

**PBHL-A 778 Dissertation Planning and Preparation II (1 cr.)**

This is the second in a two-part series to guide students through the steps necessary to produce a draft dissertation proposal. In close collaboration with course faculty and the students' dissertation committee chairs and

committee members, students will refine their proposals in preparation for oral defense.

**PBHL-A 805 Doctoral Dissertation (1-9 cr.)** Students work independently, in collaboration with dissertation committee chairs and committee members, to complete dissertations. The DrPH dissertation is the ultimate academic test of a student's competency. It requires application of key aspects of the curriculum to improving the understanding of an important public health-related administrative or policy issue.

**PBHL-B 552 Fundamentals of Data Management**

**(3 cr.)** This course teaches concepts related to research data planning, collection, storage, processing, and dissemination. The curriculum includes theoretical guidelines and practical tools for conducting public health research. Hands-on training with real-world examples and problem-solving exercises in SAS will be used to ensure that students are comfortable with all concepts.

**PBHL-B 561 Introduction to Biostatistics I (3 cr.)**

P: One year undergraduate mathematics is required. Working knowledge on linear algebra and elementary calculus is expected. Students with insufficient mathematics preparation are expected to remedy the deficiency on their own. This course introduces the basic principles and methods of data analysis in public health biostatistics. Emphasis is placed on public health concepts such as sampling, study design, descriptive statistics, probability, statistical distributions, estimation, hypothesis testing, chi-square tests, t-tests, analysis of variance, linear regression and correlation. SAS software is required.

**PBHL-B 562 Biostatistics for Public Health II (3 cr.)**

P: PBHL-B 551 or PBHL-B 561 or one semester of graduate level Biostatistics. This course introduces the advanced principles and methods of data analysis in public health biostatistics. Emphasis is placed on public health examples as they relate to concepts such as: Multiple regression, analysis of variance and covariance, logistic regression, nonparametric statistics, survival analysis, epidemiology statistics, and repeated measures analysis.

**PBHL-B 571 BIO METHODS I: LINEAR MODELS IN PUBLIC HEALTH (4 cr.)**

P: PBHL-B 551 or equivalent. This course introduces some basic designs of experiment and analysis tools for outcome data of continuous variable, such as Analysis of Variance (ANOVA), Analysis of Covariance and Linear Regression Analysis. SAS programming language will be the primary statistical analytical tool for the course.

**PBHL-B 572 BIOSTATISTICS METHOD II:**

**CATEGORICAL DATA ANALYSIS (4 cr.)** P: PBHL-B 551 or equivalent.

This course covers applied statistical methods for the analysis of categorical data with special emphasis on data collected from epidemiologic studies and general biomedical studies. The topics delivered in this course will focus on methods of categorical analysis commonly used in practice of the health sciences.

**PBHL-B 573 BIOSTATISTICS METHOD III: APPLIED SURVIVAL DATA ANALYSIS (4 cr.)**

P: Students must have taken one course in basic statistics and another

course in linear regression models. Students must have prior knowledge of SAS for completion of homework. This course covers the basic concepts of survival analysis, Kaplan-Meier curves, logrank test, Cox proportional hazard model, parametric survival models, and certain extensions. Expectations upon completion: for survival data, you should know which method to use, how to implement in software and how to interpret the results.

**PBHL-B 574 BIostatistics METHOD IV: APPLIED LONGITUDINAL DATA ANALYSIS (3 cr.)** This course covers modern methods for the analysis of repeated measures, correlated outcomes and longitudinal data, including the unbalanced and incomplete data frequently encountered in biomedical research. Class presentations and homework assignments will focus on data analysis in SAS using PROC GLM, PROC MIXED, PROC GENMOD, and PROC NL MIXED.

**PBHL-B 581 Biostatistics Computing (3 cr.)** This course introduces the necessary SAS skills for general data preparation, description, visualization, and some advanced skills. After successfully finishing this course, you will be able to perform at entry-level graduate research assistant positions and be prepared for biostatistical method courses. Data steps and the following procedures will be covered: IMPORT, SORT, PRINT, FORMAT, TABULATE, REPORT, MEANS, UNIVARIATE, FREQ, CORR, SQL, GPLOT, SG PLOT, SG PANEL, NPAR1WAY, POWER. Additionally, SAS macro, ODS and IML will also be introduced.

**PBHL-B 582 Introduction to Clinical Trials (3 cr.)** P: Analysis of variance and regression (G652 or equivalent). A working knowledge of biostatistics is assumed and general familiarity with clinical trials will be helpful. This is a standard course that prepares Biostatisticians for support of clinical trial projects. The course will cover fundamental aspects of the appropriate design and conduct of medical experiments involving human subjects (clinical research/trials) including ethics, design, sample size calculation, randomization, monitoring, data collection, analysis and reporting of the results.

**PBHL-B 583 Applied Multivariate Analysis (3 cr.)** The course will focus on applications to real data, which will be analyzed by the professor and the students using the SAS software. One priority of the course will be to have students perform many analyses on real data sets, via SAS take-home labs, to prepare students for real life applications in analyzing data and interpreting results. Students will gain experience in preparing data for analyses by merging data sets and recoding variables.

**PBHL-B 584 Biostatistics Practicum (3 cr.)** Statistical data analysis and study design is an art in practice. When and how to apply different statistical models and the interpretation of data analysis results is heavily driven by experience. This course is designed to develop students' skills in study design, data analyses, and oral and written communication through multiple real-life projects.

**PBHL-B 585 Analysis and Interpretation of Observational Studies (3 cr.)** P: PBHL-E 715. and B-652 or equivalent This course is designed for students in the PhD program in Epidemiology. Advanced students in the Master of Public Health degree program, Epidemiology

concentration may register for this course with the permission of the professor. This course examines fundamental aspects of analyzing data generated by observational epidemiology studies. The focus is on developing a solid understanding of contemporary analytical techniques to increase the validity of the study and control for possible confounding factors and biases.

**PBHL-B 586 Technical Writing and Scientific Reporting (3 cr.)** Biostatistics is an applied field that requires effective written communication. This one credit hour course is designed to help graduate students developing the necessary writing skills to produce clearly written and well-structured scientific reports.

**PBHL-B 602 Internship in Biostatistics (3 cr.)** P: MPH Core Curriculum (5 courses); Consent of Faculty Advisor. This course integrates public health theory and practice in a practice setting. Students have the opportunity to apply concepts from core and concentration courses, conduct projects, and interact with a range of health professionals in the designated setting.

**PBHL-B 616 Advanced Statistical Computing (3 cr.)** This course will cover selected computational techniques useful in advanced statistical applications and statistical research. Topics to be covered include methods for solving linear equations, numerical optimization, numerical integration, Expectation-Maximization (EM) algorithm, Monte Carlo method, Bayesian methods, bootstrap methods and stochastic search algorithms.

**PBHL-B 626 Advanced Likelihood Theory (3 cr.)** P: Stat 519 and Stat 528, or Equivalent. This course covers theoretical foundation of statistical inference with focus on likelihood theory and its application on biomedical studies. It provides a good preparation for advanced biostatistics courses such as Advanced GLM, Advanced Longitudinal Data Analysis, and Advanced Survival Analysis.

**PBHL-B 636 Advanced Survival Analysis (3 cr.)** P: Stat 528 and Stat 536 Addresses the counting process approach to the analysis of censored failure time data. Standard statistical methods in survival analysis will be examined.

**PBHL-B 646 Advanced Generalized Linear Models (3 cr.)** P: Students taking this course should have formal training in applied linear and generalized linear models. In addition, they should have a basic understanding of the theory of probability, statistical estimation and inference. Students who are not adequately prepared in aforementioned areas are expected to make up for the deficiency on their own. The theory of classical and modern approaches to the analysis of clustered data, repeated measures, and longitudinal data.

**PBHL-B 650 Readings in Public Health (1-3 cr.)** This course is designed to expose the student to published material on a specific topic or technique in the field of Public Health. The material to be studied will be determined primarily by the student under the direction of a faculty member and student will complete a written agreement, which outlines the scope of work for the semester.

**PBHL-B 656 Advanced Longitudinal Data Analysis (3 cr.)** P: PBHL-B 574 and familiarity with concepts and theory of statistical inference. Students who are uncertain

about their level of preparation are encouraged to contact the instructor. This course covers the theory of classical and modern approaches to the analysis of clustered data, repeated measures, and longitudinal data. Topics include random effects and growth curve models, generalized estimating equations, statistical analysis of repeated categorical outcomes, and estimation with missing data.

**PBHL-B 670 Topics in Public Health (3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-B 698 Advanced Biostatistics Topics (1-3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-B 700 Biostatistics Continuous Enrollment (1 cr.)** P: PBHL-B 701. PBHL-B 700 Environmental Health Continuous Enrollment in a one-credit course designed for MPH students who previously registered for PBHL-B 701 Biostatistics Concentration Project and are working on their Final Concentration Project until project grade has been assigned.

**PBHL-B 711 MS Thesis Research in Biostatistics (3-6 cr.)** This course will provide students with a culminating experience aimed at integrating their course works in biostatistical methods at MS level and biomedical studies. Through the accomplishment of the learning objectives in biostatistical methods, students will have the opportunity to practice their biostatistical knowledge and implement them in a real biomedical research project.

**PBHL-B 800 Biostatistics Doctoral Dissertation Research (1-8 cr.)** The dissertation will be written on an original topic of biostatistics research and presented as one of the final requirements for the PhD degree. The dissertation must be an original contribution to knowledge and of high scholarly merit.

**PBHL-E 517 Fundamentals of Epidemiology (3 cr.)** This course will introduce students to basic epidemiologic concepts including determinants of health and patterns of disease in populations, population health descriptive techniques, use of health indicators and secondary data sources. Students will gain an understanding of the role of Epidemiology in developing prevention strategies and policy. Among the topics to be covered are measures of mortality and morbidity, design and analysis of observational studies, community health assessment and program evaluation.

**PBHL-E 563 SYSTEMATIC REVIEW AND META-ANALYSIS IN HEALTH SCIENCES (3 cr.)** This course provides graduate students with an overview of fundamental concepts and methods of systematic review and meta-analysis in health sciences. Principles and methods in conducting a systematic review and meta-analysis are illustrated through case studies of public health and clinical medicine.

**PBHL-E 601 Advanced Epidemiology (3 cr.)** P: PBHL-E 517 and PBHL-B 551 (or concurrently enrolled). The

course focuses on Environmental Health which is the branch of public health that protects against the effects of environmental hazards that can adversely affect health or the ecological balances essential to human health and environmental quality. The environment influences many aspects of human health and well-being. Many diseases are initiated, promoted, sustained, or stimulated by environmental factors. For these reasons, the interactions people have with their environment are an important component of public health.

**PBHL-E 602 Epidemiology Public Health Internship (3 cr.)** P: MPH Core Curriculum (5 courses); Consent of Faculty Advisor. This course integrates public health theory and practice in a practice setting. Students have the opportunity to apply concepts from core and concentration courses, conduct projects, and interact with a range of health professionals in the designated setting.

**PBHL-E 603 MPH Internship in Public Health Informatics: Applied Practice Experience (1-3 cr.)** P: MPH Core Curriculum (5 courses); Consent of Faculty Advisor. This course provides an applied practice experience in which students integrate concepts from core and concentration courses, conduct projects, solve problems, gain valuable work experience, and interact with professionals in public health informatics. The student works with the faculty advisor and an academically and professionally qualified preceptor in the agency.

**PBHL-E 606 Grant Writing in Epidemiology (3 cr.)** The course is open to all graduate students. The course will introduce the grant writing format and process and teach some grantsmanship. Student will have an opportunity to exercise the grant writing process.

**PBHL-E 609 Infections Disease Epidemiology (3 cr.)** P: E517. This course is designed to provide a basic overview of the infectious disease process, including disease agents, transmission routes, immunity and public health significance. The course introduces principles of infectious disease epidemiology, including outbreak investigation and surveillance, using case studies as examples. Concepts on globalization of disease, microbial ecology, and disease eradication also are discussed.

**PBHL-E 610 Global Chronic Disease Epidemiology (3 cr.)** P: PBHL-E 517. This course is designed to introduce a wide range of chronic diseases including cancer, cardiovascular disease, obesity and type 2 diabetes from an epidemiologic perspective. The graduate students are expected to learn not only the current knowledge regarding the epidemiology of various chronic diseases, but also the methods of conducting a chronic disease epidemiologic research which will be discussed in the majority of lectures using appropriate examples in terms of both traditional and genetic/molecular epidemiologic approach.

**PBHL-E 618 Global Cancer Epidemiology (3 cr.)** P: PBHL-E 517. This course is designed to provide an overview of the epidemiology of common cancers, as well as methodologic issues in etiologic research and cancer screening. Emphasis will be placed on risk factors that can be modified for cancer control and prevention.

**PBHL-E 629 Introduction to Genetic Epidemiology (3 cr.)** P: PBHL-E 517 and PBHL-B 551. This course will introduce students to basic genetic epidemiological



concepts, including human genetics, concepts and methodology used in genetic epidemiology. Students will gain an understanding of the role of Genetic Epidemiology in designing and interpreting studies to determine genetic roles in common diseases.

**PBHL-E 635 Foundations in Public Health Informatics (3 cr.)** This course will introduce the application of Informatics in the Public Health field. The course will include a brief review of core public health functions, describe the current policies defining the use of informatics in public health, and outline the history of the application of informatics principles in both public health and clinical health systems.

**PBHL-E 645 INFORMATION EXCHANGE FOR POPULATION HEALTH (3 cr.)** This course explores the electronic exchange of data, information and knowledge between clinical and public health organizations in support of population health. Students will examine the strategic, organizational, legal, technical, and socio-political aspects of clinical and public health information exchange in the United States and abroad.

**PBHL-E 647 Introduction to Population Health Analytics (3 cr.)**

This course examines the use of analytics and big data in the context of population health within governmental public health agencies as well as health systems. Students will be introduced to a host of methods used to analyze population health data, and gain technical skills required to perform analytics in support of real world use cases.

**PBHL-E 650 Readings in Public Health (1-3 cr.)** This course is designed to expose the student to published material on a specific topic or technique in the field of Public Health. The material to be studied will be determined primarily by the student under the direction of a faculty member with input from the student's concentration advisor. The student is expected to work closely with the faculty member to develop a strategy to identify the material to study, plan a time frame for completion of the study and to determine the nature of the study product. Generally the product will be a summary and interpretation of the material studied in a literature review format. The student and faculty member will complete a written agreement, which outlines the scope of work for the semester. This agreement will also be signed by the concentration advisor.

**PBHL-E 666 Overview of Precision Health (3 cr.)** Introduces the broad overview of current concept.

**PBHL-E 670 Topics in Public Health (1-3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-E 675 Fundamentals Injury Epidemiology (3 cr.)** P: This course is designed for students in the Master of Health Administration and the Master of Public Health degree programs. Students not in one of these two programs must have the permission of the instructor to enroll. All students must have at least a Bachelor's Degree. Injury is the leading cause of death for individuals between the ages of 1 and 44 years. This course will

introduce students to basic epidemiologic concepts of injury, both intentional and unintentional. We will discuss the burden of injury and its effect on public health, patterns of injury in populations, the use of descriptive techniques, and secondary data sources. Students will gain an understanding of the role of Injury Epidemiology in developing prevention strategies and policy. Among the topics to be covered are measures of mortality and morbidity, design and analysis of observational studies, community health assessment and program evaluation.

**PBHL-E 700 Epidemiology Continuous Enrollment (1 cr.)** P: PBHL-E 704. Environmental Health Continuous Enrollment in a one-credit course designed for MPH students who previously registered for PBHL-E 704 Epidemiology Concentration Project and are working on their Final Concentration Project until project grade has been assigned.

**PBHL-E 704 Epidemiology Final Concentration Project (3 cr.)** P: MPH Core; Public Health Internship. The purpose of this course is to give students the opportunity to synthesize and integrate knowledge acquired through course work and the public health internship. Students prepare a substantial report or paper on their final project and present their findings in a poster format at the conclusion of the course.

**PBHL-E 706 MPH Capstone in Public Health Informatics: Integrated Learning Experience (1-3 cr.)** P: MPH Core; Public Health Internship. The capstone project, or integrated learning experience (ILE), represents the culminating experience in the MPH Program. Students' ILE must demonstrate synthesis of foundational and concentration competencies in public health informatics. In consultation with their faculty advisor, students select foundational and concentration-specific competencies appropriate to their educational and professional goals

**PBHL-E 711 APPLIED EPIDEMIOLOGY METHODS (3 cr.)** The purpose of Applied Epidemiology Methods (AEM) is to give graduate epidemiology students the opportunity to gain "hands-on" experience analyzing data to answer a specific research question. Methods and theoretical issues taught in the introductory epi courses. The focus will be on practical analysis issues with actual data.

**PBHL-E 715 Design and Implementation of Observational Studies (3 cr.)** P: PBHL-E 517 and Research Methods. This course examines fundamental aspects of designing and implementing observational epidemiology studies. The focus is on developing strategies to increase the validity of the study results by using techniques to control for possible confounding factors and biases. Topics include sampling methods, sensitivity, data weighting, standardization, selection of cases and controls, matching, data collection and project management.

**PBHL-E 750 Doctoral Topics in Public Health (3 cr.)** Courses offered under this course number would include PhD courses on topics expected to be offered only once, such as those taught by visiting faculty, and those that are newly developed and have not yet been assigned a specific course number. The course will focus on a specific topic or technique related to the field of Public

Health. The material to be studied will be determined by the instructor with input from the PhD faculty.

**PBHL-E 751 Doctoral Readings in Epidemiology (1-3 cr.)** This course is designed to expose a PhD student to published material on a specific topic or technique related to their field of study in Epidemiology. The material to be studied will be determined primarily by the PhD student under the direction of a faculty member with input from the student's concentration advisor. The PhD student is expected to work closely with the faculty member to develop a strategy to identify the material to study, plan a time frame for completion of the study and to determine the nature of the study product. Generally the product will be a summary and interpretation of the material studied in a literature review format. The PhD student and faculty member will complete a written agreement, which outlines the scope of work for the semester. The concentration advisor will also sign this agreement.

**PBHL-E 752 Doctoral Studies in Epidemiology (1-3 cr.)** This course is designed to allow PhD students the opportunity to explore research questions by collecting data or using existing data related to their field of study in Epidemiology. The study topic will be determined primarily by the PhD student under the direction of a faculty member with input from the student's concentration advisor. The PhD student is expected to work closely with the faculty member to develop the study protocol, obtain IRB approval if necessary, obtain the data and collect the planned data analysis. The time frame for completion and the nature of the study product will be determined by the PhD student, faculty member and advisor. Generally the product will be a manuscript for submission to an appropriate journal. The PhD student and faculty member will complete a written agreement, which outlines the scope of work for the semester. The concentration advisor will also sign this agreement.

**PBHL-E 765 Nutritional Epidemiology (3 cr.)** P: PBHL-E 517 and PBHL-B 551. This course provides students with an overview of fundamental concepts and methods of nutritional epidemiology and the current state of knowledge on well-studied associations between diet and chronic diseases. Emphasis will be placed on the design, implementation, analysis, and interpretation of nutritional epidemiologic studies.

**PBHL-E 775 Doctoral Research Seminar in Epidemiology (1 cr.)** This course is designed to expose PhD students to a wide range of specific research topics and issues in Public Health. The seminar topics will be chosen by the Director of the PhD program with input from other faculty members. The PhD students are expected to attend each seminar session, read assigned material, and participate in the seminar discussions. The PhD students may be asked to present their research projects during the seminar to obtain feedback and recommendations from the faculty and other students.

**PBHL-E 780 Pharmacoepidemiology (3 cr.)** P: PBHL-E 517. This is an introductory pharmacoepidemiology course. Students will learn how principles of modern epidemiologic methods are used to evaluate the safety, effectiveness, and utilization patterns of medical products (drugs, vaccines, and medical devices) in human populations, with a focus on observational studies. Related topics, including therapeutic risk management,

data sources and ethical principles will be discussed. Advanced methodology, such as that utilized to address confounding by indication and misclassification will be introduced.

**PBHL-E 800 Epidemiology Doctoral Dissertation Research (1-8 cr.)** The dissertation will be written on an original topic of epidemiology research and presented as one of the final requirements for the PhD degree. The dissertation must be an original contribution to knowledge and of high scholarly merit. The candidate's research must reveal critical ability and powers of imagination and synthesis.

**PBHL-H 501 United States Health Care: Systems, Policies and Ethical Challenges (3 cr.)** This course is designed to help students, particularly those interested in careers as public health leaders and health care managers, develop a better understanding of critical health policies and the health policy making process as well as the overall structure and key components of our health care system.

**PBHL-H 507 Management of Individual and Group Behavior (3 cr.)** This course provides a conceptual framework for understanding behavior in the work environment by introducing concepts concerning effective management of people in organizations. Key theories and concepts in the field of organizational behavior will be introduced. The focus of this course is at the micro level of analysis, addressing topics such as individual theories of motivation, job design, and diversity issues; management of work teams; group decision making; managing conflict; and leadership, influence, and power issues.

**PBHL-H 508 Managing Health Care Accounting Information for Decision-Making (3 cr.)** P: PHBL-H 200 or BUS-A 201. Provides a user-oriented understanding of how accounting information should be utilized, focusing on balance sheet and income statement and cash flow analysis, budgeting, cost analysis, and responsibility accounting.

**PBHL-H 509 Health Services Financial Management (3 cr.)** P: PBHL-H 508. The course objective is to provide students with the necessary business skills and tools to function competently in a changing healthcare environment. This course will cover two major sections: accounting fundamentals and financial analysis. Several topics within these sections will be explored with emphasis on problem solving techniques.

**PBHL-H 514 Health Economics (3 cr.)** P: 3 credit hours of undergraduate economics. Examines the principles and application of economic analysis in the health field and the economist's approach to health care issues. Provides insights offered by economic analysis of specific health issues and problems.

**PBHL-H 516 Health Services Delivery and the Law (3 cr.)** Medical-legal concepts related to hospitals and other health services organizations. Course provides an in-depth understanding of the law and the legal processes affecting the health services system. Presentation of the elements of administrative and agency processes, torts, contracts, facilities, physicians, patients, and personnel.

**PBHL-H 518 Statistical Methods for Health Services (3 cr.)** P: 3 credit hours of 300-level undergraduate

statistics. Study of the quantitative techniques commonly used to examine health-related data. Includes univariate, bivariate, and multivariate techniques. Emphasis is on using statistical techniques to make policy and administrative decisions in a health services setting. Students use standard computer software to analyze data.

**PBHL-H 521 Management Science for Health Services Administration (3 cr.)** Focus is on management science methods, as applied to health sciences administration. Includes treatment of decision theory, constrained optimization, and probability simulation.

**PBHL-H 523 Health Services Human Resource Management (3 cr.)** This course provides the knowledge and skills needed to understand the application of personnel and labor relations techniques to the health services sectors, with particular emphasis on human resources management, employees' benefit programs, and labor relations as applied to the health services delivery organization.

**PBHL-H 531 Population Health Management and Value-Based Health Insurance (3 cr.)** This course familiarizes students with the rationale, context, and underlying evidence surrounding U.S. health care reimbursement models, including managed care, prospective payment, and value-based purchasing. The population health management framework is then presented as a unifying framework to guide health administrators towards success given new reimbursement models.

**PBHL-H 602 Internship in Health Policy and Management (3 cr.)** P: MPH Core Curriculum; Consent of Faculty Advisor. This course integrates public health theory and practice in a practice setting. Students have the opportunity to apply concepts from core and concentration courses, conduct projects, and interact with a range of health professionals in the designated setting.

**PBHL-H 603 MPH Internship in Public Health Informatics: Applied Practice Experience (3 cr.)** P: MPH Core Curriculum; Consent of Faculty Advisor. This course provides an applied practice experience in which students integrate concepts from core and concentration courses, conduct projects, solve problems, gain valuable work experience, and interact with professionals in public health informatics. The student works with the faculty advisor and an academically and professionally qualified preceptor in the agency.

**PBHL-H 610 Lean in Healthcare Administration (3 cr.)** A combination of experiential (learn by doing) and lecture formatted learning aimed at introducing students to the concept of Lean thinking and leadership in healthcare organizations. Within the course students will be introduced to: the history of Lean and its rise in healthcare, identification and quantification of the value of waste removal in process oriented work systems, Lean thinking, facilitation, tools and leadership. Students will work independently and in small groups.

**PBHL-H 611 Policy Design, Implementation and Management (3 cr.)** The course will engage students in the examination of the public policy making process, including the politics of health and the implications for

the future of health policy in the United States and the world. Health policy topics will be covered from economic, financial, sociological, political and psychological perspectives. Analytical paradigms are applied to organizational or macro-policy making issues. Topics vary by semester according to current policy challenges faced at the federal level.

**PBHL-H 612 Marketing Health Services Delivery (3 cr.)** This course examines the marketing function and the marketing mix; philosophy and principles behind a marketing-driven health service organization; the dynamic healthcare environment; healthcare consumers; marketing research; the promotional mix; and the role marketing management plays in today's health service organization.

**PBHL-H 613 Public Health and Emergency Preparedness (3 cr.)** This graduate elective course is designed for learners to apply emergency preparedness concepts to natural and man-made disasters. The course will also review biological, radiological and chemical terrorism agents. The content will be delivered via, seminar discussion, web-based activities, guest speakers and resource exploration. Public health response to emergency preparedness at local, state and national levels will also be discussed.

**PBHL-H 616 LEADING PUBLIC HEALTH SERVICE ORGANIZATIONS (3 cr.)** This course explores the discipline of management and its major components and functions relating to leading public and private health service organizations. This course will provide students with a foundation of basic management and leadership theory as well as fundamentals, principles, philosophies, methods and techniques for effective leadership which have particular relevance and application in healthcare.

**PBHL-H 619 Financial Management for Public Health Organizations (3 cr.)** To further develop the student's knowledge of financial management of public health organizations. Topics will include: Financial Statements; Measuring Income; Net Worth and Cash; Break Even Analysis; Cost Allocation; Budgeting for Operations; Analyzing Financial Performance; Time Value of Money; Governmental Accounting and Budgeting Capital Budgeting.

**PBHL-H 621 Grant Writing and Administration for Public Health (3 cr.)** This course explores grants as a source of funding to develop and operate programs to address public health issues. The course is designed to introduce students to the processes for applying for and managing grant funds. The course exposes students to approaches to identifying health issues as a target for grant funding, identifying appropriate grant funding sources, learning about the requirements for applying for a grant, methods for developing a grant for submission, and developing a basic structure for using and managing grant funds to implement the objectives of a grant.

**PBHL-H 623 Health Care Applications of Strategic Management (3 cr.)**

Known as the "Capstone" Course, a final semester course in the MHA Program that utilizes the Capstone Project as the central component of learning for the course. The Capstone Project is a healthcare service organization - sponsored project of significant importance to the sponsor as well as demanding of the student to apply

knowledge and skills to a real administrative issue. The Project requires students to utilize a variety of skills including interpersonal, conceptual, critical thinking, report & executive writing, oral presentation, coordination and organization to satisfactorily fulfill the Capstone Project requirements. Guest lecturers in healthcare executive roles are invited to share administrative and leadership challenges, strategic management issues and experiences, and operating challenges from the health services field. Guest lecturers provide valuable insight to facilitate the transition from the academic setting to the health care industry work place. The class will also emphasize the development of personal leadership philosophies and principles. The development of a personal set of leadership philosophies and principles is designed to help prepare the students for early career success and to set a foundation for professional growth and development.

#### **PBHL-H 624 Developing Strategic Capability (3 cr.)**

This course aims to develop the student's knowledge and ability in strategic management in health services organizations. Based on an introduction to the general process model of strategic management, the course will engage in detailed discussions of a series of topics in strategic management. These topics include the identification of the organization's mission, vision, and values, the analysis of the external and internal environment of the organization, the identification of strategic challenges and opportunities, the development of strategies, the evaluation of strategies, the communication of strategies, and the development and evaluation of an action plan.

The course emphasizes the unique strategic challenges facing health services organizations and their leadership, and aims to develop accordingly the student's ability to identify, analyze and address these challenges.

The course utilizes lectures, group discussion, and real-life case studies to facilitate the understanding of basic course content and the conceptual model of strategic management. Students will also be required to analyze a strategic case and apply the conceptual strategic planning process.

#### **PBHL-H 628 Health Care Information Systems (3 cr.)**

This course introduces the management of healthcare information systems. Topics include analyzing system requirements, system design and evaluation, selecting computer resources, and managing the implementation process.

#### **PBHL-H 639 Law Poverty and Population Health (3 cr.)**

Public health law is law that affects the health conditions of populations. In the United States, this contrasts with medical law or general health law, which focus more on the health-care delivery system and physician-patient relationships.

#### **PBHL-H 641 Ethics and Public Health (3 cr.)**

This course is an introduction to the role of ethics in population health-related programs, policymaking, professions and research.

**PBHL-H 644 Health Impact Assessment (3 cr.)** The goal of this course is to introduce students to the theoretical and practical aspects of health impact assessment (HIA) as a methodological tool in public health. HIA utilizes a variety of qualitative and quantitative methods and tools, designed to assess the potential health effects of a public policy, program, project, or initiative. While HIA is still an emerging practice in the United States, in Europe, Canada, and other areas of the world, the assessment of the public health impact of public decisions have been performed regularly to support policy decisions and promote conditions required for optimal health. During the first part of the semester, students will learn the necessary steps to conduct an HIA, review national and international case studies, and discuss how findings may or may not impact policy making. During the second half of the course, students will work in teams with a local or state health department to examine the potential health impact of policy proposals in Indiana.

**PBHL-H 645 Introduction to Leadership and Professional Development (3 cr.)** Through multiple interactions with a variety of healthcare leaders, readings, and field experiences, entering MHA students broaden their understanding of the various components that comprise our healthcare system. In addition, learners will self-assess their competencies, reflect on their learning, with a focus on creating a Professional Development Plan.

**PBHL-H 646 Operations Management for Health Administration (3 cr.)** Best practices for operationalizing strategy in healthcare organizations including: goal setting; measuring, monitoring, and controlling organizational performance; organizational design; change management; quality management and safety; process improvement; and value based care.

#### **PBHL-H 650 Readings in Public Health (1-3 cr.)**

This course is designed to expose the student to published material on a specific topic or technique in the field of Public Health. The material to be studied will be determined primarily by the student under the direction of a faculty member with input from the student's concentration advisor. The student is expected to work closely with the faculty member to develop a strategy to identify the material to study, plan a time frame for completion of the study and to determine the nature of the study product. Generally the product will be a summary and interpretation of the material studied in a literature review format. The student and faculty member will complete a written agreement, which outlines the scope of work for the semester. This agreement will also be signed by the concentration advisor.

**PBHL-H 657 Application of Cost-Effectiveness Analysis in Public Health (3 cr.)** Cost-effectiveness analysis is widely used in evaluating the performance of public health programs and policies. In this course, students will learn to frame the conceptual model, to collect and synthesize data regarding "cost" and "effectiveness," to perform a "cost-effectiveness" to perform a cost-effectiveness analysis, and to form recommendations based on the analysis.

**PBHL-H 658 RESEARCH CONCEPTS IN HEALTH POLICY AND MANAGEMENT (3 cr.)** P: Students should complete all the core courses before taking this class. This course examines fundamental research methods used in

the field of public health. The focus is on understanding how community in scientifically valid methods and how study results in daily fairly interpreted.

**PBHL-H 670 Topics in Public Health: (1-6 cr.)** P: PBHL-H 705. This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-H 700 Health Policy and Management Continuous Enrollment (1 cr.)** P: PBHL-H 705. This is a one-credit course designed for MPH students who previously registered for PBHL-H 705 Health Policy and Management Concentration Project and are working on their Final Concentration Project until project grade has been assigned.

**PBHL-H 702 Internship in Health Services Management (3 cr.)** P: Requires the equivalent of a minimum of 3 credit hours of on-site experience under the supervision of a qualified preceptor and program faculty. Grading is on an S/F basis. The Internship is a learning experience will assist students/future as health care executives with the development of their leadership philosophy and style, as well as understanding the complex problems and challenges associated with planning, organizing, managing, leading, financing and evaluating the delivery of health services in numerous settings.

**PBHL-H 705 Health Policy and Management Final Concentration Project (3 cr.)** P: MPH Core; Public Health Internship. The purpose of this course is to give students the opportunity to synthesize and integrate knowledge acquired through course work and the public health internship. Students prepare a substantial report or paper on their final project and present their findings in a poster format at the conclusion of the course.

**PBHL-H 706 MPH Capstone in Public Health Informatics: Integrated Learning Experience (3 cr.)** P: MPH Core; Public Health Internship. The capstone project, or integrated learning experience (ILE), represents the culminating experience in the MPH Program. Students' ILE must demonstrate synthesis of foundational and concentration competencies in public health informatics. In consultation with their faculty advisor, students select foundational and concentration-specific competencies appropriate to their educational and professional goals.

**PBHL-H 711 Capstone Experience for Health Policy and Management (3 cr.)** P: PBHL-H 602: Please contact Sarah Johnson shm@indiana.edu for authorization to register. This course will provide students with a culminating experience aimed at integrating their learning throughout the MPH program. Students will determine their proficiency in public health through the development of an ePortfolio, and engaging in professional development through various activities and presentations to prepare them for professional life.

**PBHL-H 747 Health Policy and Management Research Seminar (12 cr.)** The objective of this course is for students learn how and practice critically appraising, developing, and defending research studies related to

Health Policy and Management. These are broad skills that should continuously be improved throughout students' time in a PhD program. Therefore, this course is designed to be taken repeatedly so that students at different stages of their PhD studies can continue to develop their skills.

The course will be taught seminar style, meaning that class sessions will often consist of roundtable discussions of published and proposed research studies. In these discussions, students are expected to participate heavily and to drive much of the discussion.

**PBHL-H 751 Doctoral Readings in Health Policy and Management (1-3 cr.)** This course is designed to expose a PhD student to published material on a specific topic or technique related to their field of study in Health Policy and Management. The material to be studied will be determined primarily by the PhD student under the direction of a faculty member with input from the student's concentration advisor. The PhD student is expected to work closely with the faculty member to develop a strategy to identify the material to study, plan a time frame for completion of the study and to determine the nature of the study product. Generally the product will be a summary and interpretation of the material studied in a literature review format. The PhD student and faculty member will complete a written agreement, which outlines the scope of work for the semester. The concentration advisor will also sign this agreement.

**PBHL-H 752 Doctoral Readings in Health Policy and Management (1-3 cr.)** This course is designed to allow PhD students the opportunity to explore research questions by collecting data or using existing data related to their field of study in Health Policy and Management. The study topic will be determined primarily by the PhD student under the direction of a faculty member with input from the student's concentration advisor. The PhD student is expected to work closely with the faculty member to develop the study protocol, obtain IRB approval if necessary, obtain the data and collect the planned data analysis. The time frame for completion and the nature of the study product will be determined by the PhD student, faculty member and advisor. Generally the product will be a manuscript for submission to an appropriate journal. The PhD student and faculty member will complete a written agreement, which outlines the scope of work for the semester. The concentration advisor will also sign this agreement.

**PBHL-H 775 Doctoral Research Seminar in Health Policy and Management (1-3 cr.)** This course is designed to expose PhD students to a wide range of specific research topics and issues in Public Health. The seminar topics will be chosen by the Director of the PhD program with input from other faculty members. The PhD students are expected to attend each seminar session, read assigned material, and participate in the seminar discussions. The PhD students may be asked to present their research projects during the seminar to obtain feedback and recommendations from the faculty and other students.

**PBHL-H 781 Research Designs in Health Policy & Management (3 cr.)** This course exposes PhD students to research designs used in health policy and management literature. Topics covered include types of study designs including their benefits and drawbacks with a strong focus on casual

inference. Students will gain an improved grasp of the interdisciplinary language of HPM research.

**PBHL-H 782 Health Services Empirical Methods**

**(3 cr.)** The course will review quantitative methods useful to health services research, the emphasis will be on the practical application of such methods, including issues related to data management, the use of different software packages to implement such methods, and the effective presentation of quantitative findings to a variety of audiences.

**PBHL-H 783 Qualitative Methods in Health Services Research (3 cr.)**

This is a qualitative research methods course for doctoral students. Emphasis will be placed on ethnographic field methods as they apply to understanding the organization, implementation, and evaluation of health services. Students will: learn qualitative research design; collect, manage, and analyze qualitative data; and report qualitative findings.

**PBHL-H 786 Healthcare Organizations Research (3 cr.)**

This seminar is the introductory seminar for HPM doctoral students and should be taken in the first or second year of your graduate study. The broad goal of the course is to help you develop your skills in analytic reasoning, critical thinking, knowledge translation, and professional self-reflection necessary for a successful research career.

**PBHL-H 799 Dissertation Proposal for Health Policy & Management (4 cr.)** This course will provide students with time to prepare for the qualifying examination and prepare their dissertation prospectus. The prospectus includes the information required by the IUPUI Graduate Office.

**PBHL-H 800 Doctoral Level Directed Studies**

**(1-12-12 cr.)** The dissertation will be written on an original topic of research and presented as one of the final requirements for the PhD degree. The dissertation must be an original contribution to knowledge and of high scholarly merit. The candidate's research must reveal critical ability and powers of imagination and synthesis. The dissertation is written under the supervision of a research director and a research committee. The data used by the student may involve analysis of primary or secondary data.

**PBHL-H 805 Doctoral Dissertation (3 cr.)** Students work independently, in collaboration with dissertation committee chairs and committee members, to complete dissertations. The DrPH dissertation is the ultimate academic test of a student's competency. It requires application of key aspects of the curriculum to improving the understanding of an important public health-related administrative or policy issue.

**PBHL-P 500 Social and Behavioral Science in Public Health (3 cr.)**

This course is designed to introduce students to the social and behavioral science principles that provide the foundation for health program planning and disease prevention with an emphasis on population-based public health approaches. Students will explore topics that promote a broader and better understanding of determinants of health; the multiple factors contributing to health and illness behaviors; and the fundamentals,

theories and principles that shed light on health and illness behaviors.

**PBHL-P 504 U.S. Health Care Systems and Health Policy (3 cr.)**

This course examines the U.S. health care and public health systems including the structure, components, and financing of these systems. Ethical concepts, policy making, implementation, and impacts of major health care and public health policies will be discussed.

**PBHL-P 506 POPULATION AND PUBLIC HEALTH**

**(3 cr.)** The management of the health of a population requires attention to the multiple determinants of health including: medical care, public health, and the environment. As a key component of population health, this course provides a broad introduction to the principles and organization of public health.

**PBHL-P 510 Introduction to Public Health (3 cr.)**

Students will learn the basic foundations and disciplines of public health. Explore the public health impact where populations live, work and play will be covered. Students will develop tools to examine issues and create solutions through a public health lens.

**PBHL-P 511 Comprehensive Methods & Applications in Biostatistics and Epidemiology (3 cr.)**

This course provides an introduction to concepts of epidemiology and principles of biostatistical methods using software applications such as Excel, Dedoose and SPSS. Students will discover how to answer complex questions through both quantitative and qualitative methods that can shape public health policy, programs, and interventions.

**PBHL-P 512 Communication and Leadership in Public Health (3 cr.)**

P: PBHL-P 510 and PBHL-P 511 Explores fundamental concepts of leadership, communication, and advocacy and applies them to public health challenges. Introduces advanced professional leadership skills, such that learners will be able to adapt interventions effectively within the organizational, social, and political environments. Develops inter-personal communication skills including: presentations, interviewing, conflict management, negotiation and risk communication.

**PBHL-P 513 Planning, Evaluation and Management in Public Health (3 cr.)**

P: PBHL-P 510 and PBHL-P 511 Explore methodologies to identify community health priorities and inequities. Utilize scientifically sound methods to design culturally appropriate programs and policies to address those needs. Identify and incorporate evaluation strategies to improve quality and effectiveness of programs and policies. Strengthen management systems to improve efficiency.

**PBHL-P 517 Fundamentals of Epidemiology (3 cr.)**

This course will introduce students to basic epidemiologic concepts, including determinants of health and patterns of disease in populations, population health descriptive techniques, use of health indicators, and secondary data sources. Students will gain an understanding of the role of epidemiology in developing prevention strategies and policy. Among the topics to be covered are measures of mortality and morbidity, design and analysis of observational studies, community health assessment, and program evaluation.

**PBHL-P 519 Environmental Science in Public Health (3 cr.)**

The course focuses on environmental health, which is the branch of public health that protects against the effects of environmental hazards that can adversely affect health or the ecological balances essential to human health and environmental quality. The environment influences many aspects of human health and well-being. Many diseases are initiated, promoted, sustained, or stimulated by environmental factors. For these reasons, the interactions people have with their environment are an important component of public health.

**PBHL-P 551 Biostatistics for Public Health I (3 cr.)**

This course introduces the basic principles and methods of data analysis in public health biostatistics. Emphasis is placed on public health examples as they relate to concepts such as sampling, study design, descriptive statistics, probability, statistical distributions, estimation, hypothesis testing, chi-square tests, t-tests, analysis of variance, linear regression, and correlation.

**PBHL-P 602 Public Health Internship (3 cr.)**

This course integrates public health theory and practice in a practice setting. Students have the opportunity to apply concepts from core and concentration courses, conduct projects, and interact with a range of health professionals. Students work both with a faculty advisor and qualified preceptor in the agency.

**PBHL-P 650 Readings in Public Health (3 cr.)**

This course is designed to expose the student to published material on a specific topic or technique in the field of public health. The material to be studied will be determined primarily by the student under the direction of a faculty member with input from the student's concentration advisor. The student is expected to work closely with the faculty member to develop a strategy to identify the material to study, plan a time frame for completion of the study, and to determine the nature of the study product. Generally, the product will be a summary and interpretation of the material studied in a literature review format. The student and faculty member will complete a written agreement, which outlines the scope of work for the semester. This agreement will also be signed by the concentration advisor.

**PBHL-P 670 Topics in Public Health (3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-P 700 Concentration Project Completion (3 cr.)**

Continuous enrollment in a one-credit course designed for MPH students who have completed all MPH requirements except the final concentration project are required to enroll in P700 no more than four times.

**PBHL-S 510 Introduction to Research Methods in Public Health (3 cr.)**

This course examines fundamental research methods used in the field of public health. The focus is on understanding how community and clinical data are collected in scientifically valid methods and how study results are fairly interpreted. Students will learn how

to critique published research to identify the strengths and limitations of the designs and approaches used, along with possible confounding factors and biases. Topics include components of research studies, including: justification for a research project, development of research questions, research designs (qualitative, quantitative), selection of participants, sampling methods, project management, and data for analysis. Methods used to complete and interpret community-based needs assessments and program evaluation will be included.

**PBHL-S 602 Internship in Social and Behavioral Science (3 cr.)**

P: MPH Core Curriculum (5 courses); Consent of Faculty Advisor. This course integrates public health theory and practice in a practice setting. Students have the opportunity to apply concepts from core and concentration courses, conduct projects, and interact with a range of health professionals in the designated setting. Linked to the student's chosen concentration, this work experience exposes the student to new issues and new ways to solve problems and offers the student an opportunity to gain work experience in his/her concentration major and, at the same time, provides valuable job skills. The student works both with a faculty advisor and an academically and professionally qualified preceptor in the agency.

**PBHL-S 605 Public Health Biology (1 cr.)** Students will gain foundational knowledge of the biological basis of select leading public health issues, and practice in communicating the intersection of biology and public health promotion strategies. Topics will include at least one example of a(n) chronic disease, infectious disease, maternal and child health issue, and mental health condition.

**PBHL-S 615 Public Health Qualitative Methods (3 cr.)**

This course provides an introduction to qualitative research methods. Students will learn about and gain applied experience in qualitative data collection approaches, including interviews and observations. Students will also learn about and apply qualitative data analysis skills, as well as learn techniques for effectively summarizing and presenting qualitative research results.

**PBHL-S 617 Health Promotion and Disease Prevention (HP/DP) (3 cr.)**

Health promotion and disease prevention are important in improving a nation's health. This course will provide an in-depth analysis of key foundational concepts of health promotion to include: advocacy, health communication strategies, and using evidence and theory to select health promotion programs across settings.

**PBHL-S 619 Health Disparities and Health Equity (3 cr.)**

This course will provide a broad overview of health disparities. Specifically, this comprehensive course will focus on helping to students to 1) understand what health disparities are and to critically analyze why they exist, and 2) learn about multi-level and evidence-based strategies that are utilized to effectively address health disparities.

**PBHL-S 620 Stress and Population Health: A**

**Biopsychosocial Exploration (3 cr.)** This course will examine stress holistically, i.e. from a biological/physiological, psychological and sociological perspective. You will learn how stress is manifested psychologically as well as in the systems of the body. You will also examine stress from a community/population perspective. Finally, the effects of stress on the body will be examined through

examples from its role as a cause of and contributor to major illnesses.

**PBHL-S 622 Coaching for Health Behavior Change (3 cr.)** This course is designed to teach students how to coach individuals and groups attempting to improve their health behaviors. Theory, evidence-based practices, and different types of communication and interviewing styles will be explored through hands-on activities. Students will practice the learned techniques throughout the semester and will be able to apply these techniques upon completion of the course. Health educators, health educator trainers, health care providers, and others interested in guiding behavior change will benefit from this course.

**PBHL-S 625 Applied Public Health Campaigns and Social Marketing Strategies (3 cr.)** Effectively communicating public health messages can be a challenge. From advertising a program to promoting behavior change, there are many social marketing strategies and tools that yield positive results. This course will offer students practical opportunities to apply these strategies and tools in the development and evaluation of public health campaigns. Case studies, guest speakers, and hands-on experiences will be incorporated in this class.

**PBHL-S 630 Global Maternal Health (3 cr.)** The impact of global maternal and child health (MCH) conditions at different stages of the life cycle, and their functional biopsychosocial outcomes will be explored. Students will explore the different contexts that influence global MCH as well as intervention and policy strategies that optimize MCH.

**PBHL-S 631 Maternal, Child, and Family Health (3 cr.)** This course is designed to give students an overview of the social, economic and environmental issues currently affecting the health of women of reproductive age, infants and children. Focus will be placed on the maternal-fetal period with an examination of the complex interplay between the biologic, behavioral, psychological and social factors that affect health status and reproductive outcomes.

**PBHL-S 635 A Biosocial Approach to Global Health (3 cr.)** This course examines community capacity building in foreign nations. Students will learn a social justice perspective of global health and global community engagement strategies and grow their skill base by planning programs in a foreign country that align with the UN Sustainable Development Goals.

**PBHL-S 640 Culture and Health (3 cr.)** In this course we will examine what is meant by culture, the ways in which culture intersects with health issues, and how public health efforts (domestic and global) can benefit by understanding and working with cultural processes.

**PBHL-S 650 Readings in Public Health (1-3 cr.)** This course is designed to expose the student to published material on a specific topic or technique in the field of Public Health. The material to be studied will be determined primarily by the student under the direction of a faculty member with input from the student's concentration advisor. The student is expected to work closely with the faculty member to develop a strategy to identify the material to study, plan a time frame for

completion of the study and to determine the nature of the study product. Generally the product will be a summary and interpretation of the material studied in a literature review format. The student and faculty member will complete a written agreement, which outlines the scope of work for the semester. This agreement will also be signed by the concentration advisor.

**PBHL-S 660 Community Capacity Building in a Global Health Context (3 cr.)** This course examines strategies to build the capacity of communities, in foreign nations, to address their priority health and social issues. The course will present students with social justice perspective of global health and global community engagement strategies. This foundational knowledge will be coupled with practical experience in working with global partners to develop a strategic plan that addresses community health issues. Students will grow their knowledge base about program planning, community engagement, social determinants, and culture by learning how to plan programs in a foreign country that align with the UN Sustainable Development Goals. Student will work in teams consisting undergraduate and graduate public health student and global partners. Collectively the team will create a strategic plan to address an identified community health issue, with MPH students also creating a white paper that proposes a solution strategy to diminish poverty in the target community. The course will require student to engage in analytical reading and discussions, and produce and deliver impactful written and oral communications.

**PBHL-S 662 Integrated Learning Experience 1 Advanced Program Planning (3 cr.)** This hybrid in-class and web-based course will provide students with a systematic approach to prioritizing, planning and evaluating health programs. Students will work with community partners to develop and evidence-based health promotion program that addresses a public health that is a priority for their organization.

**PBHL-S 664 ILE2: Research Methods and Program (3 cr.)** This course examines fundamental research methods used in the area of program evaluation in public health. The focus is on understanding how to collect, analyze, and interpret data on public programs using scientifically valid methods.

**PBHL-S 670 Topics in Public Health (1-3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-S 700 Social and Behavioral Health Science Continuous Enrollment (1 cr.)** P: PBHL-S 702. This is a one-credit course designed for MPH students who previously registered for B701 Biostatistics Concentration Project and are working on their Final Concentration Project until project grade has been assign.

**PBHL-S 702 Social and Behavioral Science Final Concentration Project (3 cr.)** P: MPH Core; Public Health Internship. The purpose of this course is to give students the opportunity to synthesize and integrate knowledge acquired through course work and the public health internship. Students prepare a substantial report or



paper on their final project and present their findings in a poster format at the conclusion of the course.

**PBHL-S 711 Capstone Experience in Social and Behavioral Sciences in Public Health (3 cr.)** P: PBHL-S 602: Please contact Sarah Johnson shm@indiana.edu for authorization to register. This course will provide students with a culminating experience aimed at integrating their learning throughout the MPH program. Through the accomplishment of the learning objectives, students will have the opportunity to practice public health through the resolution of public health problems; determine their proficiency in public health through the development of an ePortfolio, and engage in professional development through various activities and presentations to prepare them for professional life.

**PBHL-S 725 Preparing for Academia in Public Health (1 cr.)** This 1.0 credit seminar course will prepare advanced graduate students for the roles and responsibilities they may assume as faculty members. Course content will include an overview of the higher education culture and faculty expectations for teaching, research and service.

### Undergraduate Courses

**PBHL-A 115 WHATS IN YOUR BACKYARD? ENVIRONMENT AND HEALTH (3 cr.)** Environment where people live, work, play has a profound impact on human health and wellbeing. Through case-based learning, we will examine contemporary and emerging global environmental issues, their links to human health effects, and ways to solve these problems. We will explore future approaches to making environments sustainable and health-promoting.

**PBHL-A 120 Culture, Health and Happiness (3 cr.)** In the US we don't have one culture. We have regional cultures which influence our environment and health. Students of all majors can learn about mortality patterns in different cultural regions of the country, and learn to use concept maps to understand cultural influences on those patterns in death.

**PBHL-A 130 Get Creative! Solving Global Health Challenges (3 cr.)** Novel solutions are needed to address disease- and non-disease challenges in global health. Learn how technical solutions can help overcome barriers to disease prevention, diagnosis and treatment, and how stakeholders can work together to align objectives and build capacity.

**PBHL-A 140 Preparing for Disasters (3 cr.)** Explore natural and environmental disasters we may face, steps for individual readiness to confront them, and social theories which underpin the steps. Students will learn disaster preparedness principles on the individual and community levels, and develop both a disaster plan and emergency supplies kit for themselves and their families.

**PBHL-A 215 Storytelling with Data (3 cr.)** Communicating data effectively to the public, policy makers, and media is essential to facilitate understanding, influence decision making and create change. Explore how to display and describe health and social science data. Bring data to life by choosing the best visual, the most impactful words, and the most strategic delivery.

**PBHL-A 310 Exposure Assessment Laboratory and Data Analysis (4 cr.)** This course will improve students understanding of principles in environmental exposure assessment through a two prong approach. Students will first learn to apply math and chemistry principles to environmental problems in small group learning activities. Laboratory experiments will then demonstrate exposure assessment techniques and allow student to evaluate health concerns.

**PBHL-A 316 Environmental Health Science (3 cr.)** The purpose of this course is to familiarize students with human / environment interaction and the potential impact of environmental hazards on human health and safety. This course focuses on the study of disease and injury-causing agents in the environment, where they come from, and their impact on human populations and communities. A variety of man-made and natural environmental agents will be studied. We will focus on biological, chemical, physical, and psychosocial agents and the illnesses and injuries produced by them. A variety of environmental control strategies, including technology, health promotion, and policy, will be examined throughout the course.

**PBHL-A 320 PREVENTION STRATEGIES TO IMPROVE POPULATION HEALTH (3 cr.)** Fundamentals of strategies to prevent injury and illness at the population level. We will explore the concepts of primary, secondary, and tertiary prevention with emphasis on regulatory, design, and clinical solutions.

**PBHL-A 325 HOW NOT TO GET KILLED: INJURY (3 cr.)** An examination of intentional and unintentional injury in our homes, on our streets, and in our workplaces. We will explore major injury classes, the impact on the public's health, identification of causal factors, and intervention strategies.

**PBHL-A 330 HUMANS IN EXTREME ENVIRONMENTS (3 cr.)** Exploration of human performance, resilience, and adaptation to extreme environmental conditions, with emphasis pertaining to the occupational environment. We will examine physiological response and other human factors in these environments, including temperature extremes, low and high altitude, and in air/space travel.

**PBHL-A 380 Environmental Health Internship (3-6 cr.)** P: Permission of Instructor. The internship in environmental health science provides students with an opportunity to gain meaningful and appropriate experience in any of the disciplines within environmental health. Students may seek internships in local, state, national, or international organizations in the government, not-for-profit, business, or industrial sectors, providing the work of the internship reflects one of the environmental health disciplines. Internships may be paid or unpaid.

**PBHL-A 410 FUNDAMENTALS OF TOXICOLOGY (3 cr.)** This course is structured for those students desiring a basic understanding of the principles and practices of toxicology and how these are applied in the environmental regulator arena.

**PBHL-A 415 EXPLOSIONS, COLLAPSES, AND TOXIC SPILLS: PREVENTION & RESPONSE (3 cr.)** An exploration of catastrophic global incidents that have caused large scale fatalities, injury, illness, and massive destruction. We will examine select case studies to

determine events leading to the incident, the subsequent rescue and recovery efforts, impact on the public's health, and identification of causal factors to inform prevention strategies.

**PBHL-A 420 ARMED CONFLICT, NATURAL DISASTERS, AND HEALTH (3 cr.)** Explores the environmental public health concerns facing refugee populations from armed conflict, natural disasters, and other forced migration. Examines the response from local and international organizations, the effects of inadequate resources, and future solutions to improve refugee health.

**PBHL-A 428 Public Health Sanitation (3 cr.)**

In this course, students will learn the fundamentals of proper food, water, and waste sanitation, and the impact healthy living conditions have on public health. We will discuss these fundamentals from the perspective of developed and developing countries and how the process of sanitation differs during emergencies and natural disasters.

**PBHL-A 430 E-waste, Toxic Materials, and Conflict Minerals (3 cr.)**

We will consider modern electronics from an environmental public health perspective. Using the lifecycle of electronics as a frame we will examine processes of production and use, consideration the people who do the work and the environment which provides the raw materials and absorbs the results.

**PBHL-A 433 Industrial Hygiene (3 cr.)**

There are nearly 5,000 workplace fatalities in the United States – about 13 deaths per day – and an estimated 50,000 annual deaths from work-related diseases. Approximately 10 million non-fatal injuries and illnesses occur each year. In this course, we will learn to anticipate, recognize, evaluate and control the hazards that face workers each day, including chemical, physical, biological, and psychosocial stressors. Through problem-based learning, we will focus on applied problem solving.

**PBHL-A 435 Energy, Climate Change, Resilience, and Health (3 cr.)**

Climate change is a contentious, complex and important topic. In this course, we will address the whole complexity of climate change, explore its connection to energy consumption and discuss its impacts on human health and welfare and the possible remediation to together navigate a sustainable path of going forward both as a society and an individual.

**PBHL-A 440 Terrorism as a Public Health Threat (3 cr.)**

Explores mass casualty / high disruption weapons as a public health threat, with an emphasis on health protection of community members and first responders. We will examine multi-hazard emergency response frameworks; the structure/function of these weapons and their health effects; and the cycle of preparedness, response, recovery and mitigation.

**PBHL-A 441 Public Health Applications of GIS (3 cr.)**

Using ArcGIS Desktop software, this course aims to familiarize students with applications of Geographic Information Systems (GIS) in the context of public health.

Public Health cases will be used to explain and teach principles, methods, and techniques.

**PBHL-A 445 Global Environmental Health & Sustainable Development (3 cr.)**

Analysis of how the global model of development is characterized by and influences relationships between the environment and human activities, and how such relationships influence human health. Based on the comprehension of such relationships, this course examines the possible approaches to control major environmental health problems in a sustainable manner.

**PBHL-A 450 Food and Water: Safety, Scarcity, Security (3 cr.)**

An exploration of food and water use, sanitation and safety, and its availability. We will examine the impact of human activity, including the demands of population growth, industrial development, and advancement in technology on food, water, and human health.

**PBHL-A 453 Study Abroad: Geneva (3 cr.)**

This course provides students with an in-depth introduction to global organizations responsible for supporting health leadership and health systems strengthening worldwide. Participants will spend substantial time out in the field meeting health experts and mid- to senior-level managers and leaders.

**PBHL-A 454 Study Abroad: London (3 cr.)**

This course provides an in-depth introduction to a global model for health services delivery and provides students with the opportunity to compare and contrast systems in England and the United States. Participants will spend substantial time out in the field visiting London-area health facilities, historical sites, and universities.

**PBHL-A 455 Study Abroad: Israel (3 cr.)**

This course provides an in-depth introduction to a global model for health services and provides students with the opportunity to compare and contrast systems in Israel and the U.S. Participants will spend time out in the field visiting health facilities, historical sites, and cultural locations in Tel Aviv and Jerusalem.

**PBHL-B 275 PROBABILITY WITHOUT TEARS AND WITHOUT CALCULUS (3 cr.)**

This is a course teaching fundamental concepts in biostatistics through computer simulation. While this is a self-contained course, working knowledge of R or another computer language is desirable.

**PBHL-B 280 Biostatistics for Health Data Scientists A Computational Approach (3 cr.)**

This course introduces students to the fundamental concepts of biostatistics through computational methods. Topics such as exploratory analysis of health data, probability and probability distributions, and the basics of inference from both the frequentist and Bayesian perspective will be presented.

**PBHL-B 285 Classical Biostatistical Regression Methods (3 cr.)**

This is the first course in a two-semester sequence teaching fundamental concepts of classical regression methods in biostatistics, both linear (i.e., least

squares) and non-linear (e.g., logistic, Poisson, etc.). While this is a self-contained course, working knowledge of the R statistical environment is desirable.

### **PBHL-B 300 INTRODUCTION TO BIOSTATISTICS (3 cr.)**

This is an introductory survey of statistical reasoning and analysis.

**PBHL-B 301 Biostatistics for Health Information Management (3 cr.)** This course introduces the basic principles and methods of data analysis in public health biostatistics. Emphasis is placed on public health examples as they relate to concepts such as sampling, study design, descriptive statistics, probability, statistical distributions, estimation, hypothesis testing, chi-square tests, t-tests, analysis of variance, linear regression and correlation.

### **PBHL-B 385 Contemporary Biostatistical Regression Methods (3 cr.)**

This is the second course in a two-semester sequence teaching fundamental concepts of contemporary regression methods in biostatistics, linear and non-linear. Advanced topics like shrinkage methods (principal components, ridge regression, Lasso, etc.), random effects and repeated measures, non-parametric regression (smoothing) and additive models will be presented. Pre-requisites are PBHL B-285 (Classical biostatistical regression methods) or permission of instructor. While this is a self-contained course, working knowledge of the R statistical environment is desirable.

### **PBHL-B 401 Health Data Science Internship I (3 cr.)**

This course provides real-world experience applying data science techniques in the form of an internship within the university or industry setting. Students in the Bachelor of Science program in Health Data Science will be matched with internship supervisors or organizations and undertake projects geared towards applying skills they have acquired from the BS in Health Data Science curriculum.

### **PBHL-B 402 Health Data Science Internship II (3-4 cr.)**

This course provides real-world experience applying data science techniques in the form of an internship within the university or industry setting. Students in the Bachelor of Science program in Health Data Science will be matched with internship supervisors or organizations and undertake projects geared towards applying skills they have acquired from the BS in Health Data Science curriculum. Satisfactory completion of the course will be determined jointly by internship supervisor and HDS Faculty. Students should expect to submit a final project and oral report to either the organization internship supervisor, appointed HDS Faculty, or both.

### **PBHL-B 420 Introduction To Statistical Learning (3 cr.)**

This is a course teaching fundamental concepts of *statistical learning*, a broad set of methods which refers to making sense of complex data. Such methods include, but are not limited to, the sparse regression (e.g. LASSO), classification and regression trees (CART) and support vector machines. This course is intended for students starting out in this area who perhaps lack the mathematical training to absorb a very technical treatment

of these topics. For this reason, this course focuses on the application with less focus on the mathematical details.

**PBHL-B 452 Fundamentals of Public Health Data Management (3 cr.)** This course teaches concepts related to research data planning, collection, storage, processing, and dissemination. The curriculum includes theoretical guidelines and practical tools for conducting public health research. Hands-on training with real-world examples and problem-solving exercises in SAS will be used to ensure that students are comfortable with all concepts.

### **PBHL-B 481 Introduction To Biostatistical Computing (3 cr.)**

This is a course teaching fundamental concepts of biostatistical computing, a broad set of skills required for data acquisition, processing and visualization. At the end of the course the student will be able to analyze and manage statistical data, use reproducible reporting functionality, write their own functions, apply string and document processing techniques, have an understanding of object oriented programming in R, use non-standard evaluation (NSE) techniques within the R language, and create reproducible software in package form for the R language.

### **PBHL-B 490 Advanced Biostatistical Computing (3 cr.)**

This is a second course in biostatistical computing covering advanced concepts including understanding the basics of statistical algorithms and creating data products. At the end of the course the student will understand object oriented systems available in the R programming language.

### **PBHL-E 202 Topics in Public Health (1-3 cr.)**

This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-E 210 Zombie Apocalypse and Domsday Infections (3 cr.)** The focus is infectious diseases, the possibility of a zombie infection. We will discuss infections that have changed the course of history. Included topics are: disease transmission, outbreak investigations, control measures, assessment, and field investigations.

**PBHL-E 303 Topics in Public Health (1-4 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

### **PBHL-E 322 Principles of Epidemiology (3 cr.)**

This course will introduce students to basic epidemiologic concepts including determinants of health and patterns of disease in populations, population health descriptive techniques, use of health indicators and secondary data sources. Students will gain an understanding of the role of Epidemiology in developing prevention strategies and policy. Among the topics to be covered are measures of mortality and morbidity, design and analysis of observational studies, community health assessment and program evaluation.

**PBHL-E 323 Chasing Disease Field Epidemiology (3 cr.)** Describing the application of epidemiology in a

unexpected conditions in a population. This course, through the use of case studies, will explore the world of disease outbreaks and the field response.

**PBHL-E 330 Evidence-Based Public Health (3 cr.)** This course will introduce methods for generating, locating, assessing, adapting, and evaluating evidence for public health programs. In addition to establishing a framework for selecting evidence-based interventions, the course will include focus on principles of scientific writing necessary for public health professionals to convey messages to stakeholders.

**PBHL-E 333 Buzzed and Stoned: The Epidemiology of Substance Abuse (3 cr.)** This course will introduce students to substance abuse research from a public health perspective. We will utilize epidemiological concepts and tools to study distribution of alcohol, tobacco, and other drug use; identify social-behavioral factors that predispose individuals to engage in substance abuse and discuss health behavior theories and models; and review health and drug-control policy interventions. Students will learn key principles and concepts of substance abuse and addiction, and discuss short- and long-term effects of the primary drugs of abuse.

**PBHL-E 335 The Lurking Pandemic: Chronic Disease Epidemiology (3 cr.)** This course is designed to introduce the student to the ever-expanding area of chronic health conditions and diseases from an epidemiological perspective.

**PBHL-E 375 Fundamentals of Injury Epidemiology (3 cr.)** This course will introduce students to basic epidemiologic concepts of injury, both intentional and unintentional. Injuries associated with transportation, violence, home and occupational environments are included. We will discuss the burden of injury and its effect on public health, patterns of injury in populations, the use of descriptive techniques, and secondary data sources.

**PBHL-E 391 Public Health Surveillance (3 cr.)** Surveillance is the cornerstone of public health practice. In this course, students explore the past, present and future of public health surveillance in the context of the U.S. and international health regulations. Students will examine past and current governance as well as systems that organize surveillance efforts at local, state, federal and global levels. Historical outbreaks and measures deployed by health agencies will illustrate key concepts. Students will also examine how informatics and advanced methods are helping to transform surveillance for the future.

**PBHL-E 395 Sores and Drips: Epidemiology of Sexually Transmitted Infections (3 cr.)** The burden of sexually transmitted infections continues to climb, not only in the U.S. but globally at an incredible pace. This course will explore the epidemiology of sexually transmitted infections both in the U.S. and globally. Discussing the etiology of the STI's and methods of control and prevention. Through the use of case studies and historical exploration.

**PBHL-E 404 TOPICS IN PUBLIC HEALTH (3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a

variety of public health topics and current issues will be covered in this course.

**PBHL-E 421 Epidemiology Counts (3 cr.)** This course focuses on the principles of analysis and interpretation of epidemiological studies and introduces how to execute these procedures using SAS. The course will emphasize the application of basic quantitative principles and procedures used in epidemiology to answer questions of public health significance using a case study approach.

**PBHL-E 422 Advanced Epidemiology (3 cr.)** This course is designed for undergraduate students to attain an intermediate to advanced depth of knowledge in epidemiological methodology. Specifically, this course provides students with (1) understanding of epidemiologic study designs; (2) knowledge on key concepts in epidemiology, such as confounding and effect measure modification; (3) an introduction to applied analytic approaches in epidemiological studies, including two hands-on computer lab sessions on basic statistical analysis using SAS software; (4) an overview of internal and external validity of epidemiological studies; (5) basics in causal inference.

**PBHL-E 490 Internship in Epidemiology (3 cr.)** This course provides epidemiology students with an opportunity to synthesize and apply from the BSPH program to the practice setting. Internship research projects can take place within local, state, national, or international governmental agencies, academia, nonprofit organizations, industry, or healthcare sectors, and must be led by a qualified preceptor.

**PBHL-E 491 Capstone in Epidemiology (3 cr.)** This course provides students the opportunity to synthesize and apply skills and knowledge from the BSPH program to study the distribution and determinants of health-related events. Students and their preceptors will develop and conduct research, prepare a scientific report of their findings, and present their work as a research poster.

**PBHL-H 100 Topics in Public Health (1-3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-H 101 Influencing the Public's Health (3 cr.)** This course exposes students to the role of policy in influencing the health of human populations in our work, civil society and our own lives. Students from all disciplines will benefit from exploring empirical patterns and historical contexts that influence health policy decisions for our country's complex healthcare and public health systems.

**PBHL-H 120 HEALTH CARE DELIVERY IN THE US (1-3 cr.)** An overview of the health care delivery system in the US from the lens of health care managers, this course will introduce the history of US health care, management in the health care delivery context, the role of government and policy in health care delivery, and the interconnectedness of health care delivery and public

health. Health care administration career pathways will also be explored.

**PBHL-H 200 Health Care Accounting (3 cr.)** Health Care Accounting will provide the students with a foundation in health care accounting from long-term to acute care.

Topics will include balance sheet of financial position, income statement of revenues and expenses, journals, ledgers, trial balances and discrimination of formatting financial statements between acute care and long-term care organizations.

**PBHL-H 202 Topics in Public Health (1-3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-H 220 Public Health Systems Policy (3 cr.)** This course will examine the concepts of health policy and management and its impact on social behavioral and environmental public health sciences. Content covered will include fundamental characteristics and organizational structure of the public health system.

**PBHL-H 245 PROFESSIONALISM IN THE HEALTHCARE WORKPLACE (3 cr.)** This course provides an overview of healthcare organizational structures, professional self-presentation, business etiquette, and strategies for professional success in a healthcare workplace. An emphasis will be placed on each student's development and application of professional skills and behaviors required in healthcare administration and other sectors of the healthcare industry.

**PBHL-H 303 Topics in Public Health (1-3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-H 305 Medical Group Management (3 cr.)** Medical Group Management is a survey course that will provide students with a foundation in understanding the fundamental skills needed to manage medical group practices. The course will mainly examine the management of physician practices, including primary care, and physician specialty service lines.

**PBHL-H 310 LEAN METHODOLOGY IN HEALTHCARE ORGANIZATIONS (3 cr.)** Using a combination of experiential (learn by doing) and lectures, students will be introduced to: the history of Lean and its rise in healthcare, identification and quantification of the value of waste removal in process oriented work systems, Lean thinking, facilitation, tools and leadership. Students will work independently and in small groups.

**PBHL-H 315 High-Risk Health Behavior and Harm Reduction (3 cr.)** In this course, we will look at high-risk health behaviors through a public health lens. The term "high-risk" can refer to both behaviors and groups. High-risk behaviors are activities people engage in that make them more vulnerable to contracting specific health problems, while high-risk groups are collections of individuals prone to engage in high-risk behaviors. The effects of high-risk health behaviors extend beyond the

individual who engage in them. This is a writing intensive course.

**PBHL-H 320 Health Systems Administration (3 cr.)** This course explores components of the United States health care system and associated managerial, organizational, financial, insurance, delivery, quality improvement, workforce, performance, structures, issues and challenges. In addition, this course explores the organization and structure of public and private healthcare systems, and how recent changes in regulation and reimbursement are affecting significant change in the healthcare industry. Successful completion of this course will help provide students with a general foundation of knowledge about the U.S. health care system and major structural and organizational components, and how changes in health policy and regulation, along with changes in reimbursement, are helping to drive the integration of public health, private health, and social service organizations towards population health management.

**PBHL-H 325 HEALTH INFORMATION TECHNOLOGY MANAGEMENT AND POLICY (3 cr.)** This course will familiarize students with current issues associated with health information technology (IT) and their impact on the U.S. healthcare system. Health IT applications are playing an increasingly important role in assuring high quality care and have the potential to transform the nature of healthcare delivery. This course will review the evidence on the impact of Health IT from the perspectives of hospitals, physicians, patients, payers, and society.

**PBHL-H 330 Global Public Health (3 cr.)** All public health is global in today's world. This course will explore the key global public health issues that face countries throughout the world, ranging from malnutrition to the use of new technologies to improve health. The course will focus on the ways in which health policy of both developed and developing countries, impacts public health strategies, specific interventions, and outcomes.

**PBHL-H 345 Operations Management and Quality Improvement in Healthcare (3 cr.)** This course provides an overview of the healthcare operations management (OM), with emphasis on quality improvement. You will apply OM principles to develop more effective operational processes, mitigate risks, and improve quality. Discussions, case studies and assignments will focus on strategies and techniques of quality improvement processes, project management and others.

**PBHL-H 346 ORGANIZATIONAL BEHAVIOR & HUMAN RESOURCES FOR HEALTHCARE (3 cr.)** This course introduces disciplines of organizational behavior and human resources management (HRM) and their application to the management of healthcare organizations. The course examines how to effectively manage individuals, teams and systems in the dynamic legal, social, and economic healthcare environment.

**PBHL-H 352 Health Finance and Budgeting (3 cr.)**  
P: BUS-A 200 or BUS-A 201.  
Health Finance and Budgeting is the study of the financial management of healthcare facilities based on generally accepted business practices. The topics will include: provider payment systems, healthcare financial statements, presentation and analysis, principles and

practices in healthcare accounting, working capital management, budgeting and variance analysis.

**PBHL-H 353 Advanced Health Finance and Budgeting (3 cr.)** P: PBHL-H 352.

Advanced Health Finance and Budgeting builds on the elements learned in H352. The topics will include capital expenditure decisions, financing capital expenditures, defining cost information, time value analysis, and cost allocation strategies.

**PBHL-H 354 Health Care Economics (3 cr.)** This course applies economics to the study of administrative and policy issues in the health care sector. Economic concepts are used to explain the system of health care financing and the organization of health care delivery in the U.S. The economic evaluation of health care programs is also discussed.

**PBHL-H 361 LEADERSHIP IN HEALTH MANAGEMENT RESOLVING DISPUTES AND DIFFICULT CONVERSATIONS (3 cr.)** P: PBHL-H 320; junior

standing. Negotiation occurs every day in our professional and personal lives. Through readings, lectures, reflection, writing, and numerous in class exercises and simulations, this course will help students build principled dispute resolution and assertive communications skills critical to thriving in and leading through challenges arising in any healthcare setting.

**PBHL-H 375 Management of Health Service Organizations (3 cr.)**

This course explores the discipline of management and its major components relating to health service organizations. This course will provide students with a foundation of basic fundamentals, principles and techniques of management which have particular relevance and application in healthcare. Students will learn about management theory and its practical application in healthcare in fundamental areas such as planning, organizing, leading, and controlling. Other key elements of management such as communication, decision making, delegation, participatory management, leadership style, managing staff, teamwork, and change and innovation will be explored. Successful completion of this course will help provide students with a general foundation of knowledge about management and its application in health service organizations. Instructional methods used will include lectures, interactive discussions, readings, in-class exercises and individual and group homework assignments using a wide range of management terms, concepts, fundamentals, theories, methods, techniques, and practices used in managing health service organizations. Special emphasis will be given to the role and application of leadership in the management of a diverse healthcare workforce, in a variety of health service settings. This course is designed to help create a foundation of knowledge and understanding of management that students will use in other courses in the public health undergraduate programs.

**PBHL-H 379 CAREER PREPARATION IN HEALTH SERVICES MANAGEMENT (3 cr.)**

This course will emphasize career planning and professional development in health services management.

Students will be led through the internship search process in preparation for their practical experience in health administration. Health care workplace culture will also be explored.

**PBHL-H 380 Health Services Management Internship (1-6 cr.)** P: Permission of Instructor. The Internship

Course is designed to provide students with work experience that compliment their classroom preparation. The internship program is a self-directed program in which eligible students are responsible for identifying internship opportunities. Students are expected to identify potential opportunities and work with their faculty advisor to ensure these opportunities are appropriate to the student's knowledge and skills and suitable for the student's goals. It is offered from 1 to 6 credits with 80 hour increments of an internship experience equivalent to 1 credit hour.

**PBHL-H 401 Strategic Planning for Health**

**Organizations (3 cr.)** This course examines the strategic planning process and the compelling reasons for its relevance in today's dynamic healthcare environment. In this course, students will establish goals for the strategic planning process, and develop a strategic plan document and its major components, format and structure as applied in health service organizations. Students will examine and apply the strategic management process, and recognize and describe the supportive activities including the initial organizational "plan to plan"; board of directors "Kick off" meeting or retreat; stakeholder interviews using a structured questionnaire, and the major strategic plan document components that include the executive summary; directional strategies; environmental assessment; service area competitive analysis; internal analysis; SWOT analysis; strategic initiatives; strategic action plan implementation monitoring, measurement and evaluation; and strategic thinking and momentum. In addition, the final deliverables (completed in assigned teams) include compiling / finalizing a strategic plan document for a health services organization, and an in-class business presentation of the strategic plan.

**PBHL-H 404 Topics in Public Health (3 cr.)** This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-H 411 Chronic And Long Term Care Administration (3 cr.)**

This course is an introductory study of the purpose, organization, and management of long-term care services and providers. The course will provide an understanding of who receives long-term care service; the venues in which services are provided; how services are provided; how providers are regulated; how they are paid; and career opportunities. The course will focus upon the needs of the elderly; the role of long-term care as a member of the healthcare services provider community; and, the organization and structure, of the continuum of long-term care provider types. The impact of the regulatory processes upon management of personnel, services and finances will be studied in detail. Current issues, including quality improvement initiatives impacting the future of long-term care will be reviewed.

**PBHL-H 420 Health Policy (3 cr.)** P: PBHL-H 320.

This course will provide the opportunity to examine and analyze the financing, organization and delivery of health care in the U.S. and how these core elements are shaped and influenced by health care policy and decision-making. Additionally, we will examine the landmark health care reform currently being implemented vis-a-vis the Patient Protection and Affordable Care Act (PPACA) of 2010, also known as Obama Care. <http://www.healthcare.gov/law/full/index.html>

**PBHL-H 432 Health Care Marketing (3 cr.)** A practical study of marketing in health care institutions, health service organizations, and health insurers. A basic foundation in marketing principles, new methods in marketing products and services, and inexpensive marketing techniques will be examined.

**PBHL-H 441 Legal Aspects of Health Care Administration (3 cr.)**

This course will familiarize students with, and introduce students to, the legal and regulatory terrain unique to health care facilities by providing an overview of the legal liabilities and obligations of health care providers as well as the potential legal recourses available.

**PBHL-H 450 HEALTH SYSTEMS AROUND THE WORLD: UNDERSTANDING ENGLAND'S NATIONAL HEALTH SERVICE (3 cr.)** This course provides an in-depth introduction to a global model for health services delivery and provides students with the opportunity to compare and contrast systems in England and the United States. Participants will spend substantial time out in the field visiting London-area health facilities, historical sites, and universities.

**PBHL-H 455 Topics in Public Health (1-3 cr.)** Extensive discussion of selected topics in public health. The topic may change from semester to semester, based on resource availability and student demand. May be repeated for credit.

**PBHL-H 474 Health Administration Ethics Seminar (3 cr.)** P: PBHL-H 320 and Senior Standing.

This course will follow an interactive, theory-based approach to examine ethical decision-making challenges from health care provider, managerial, and public health perspectives. It will examine ethical dilemmas in the context of health services delivery to facilitate discussion about the broader implications of decisions made. Students must exhibit the ability to think critically about society and culture, social determinants that influence health outcomes, and the duties and responsibilities of health care actors at the individual, organizational, and societal levels to improve health care delivery as well as outcomes. Lastly, students are expected to demonstrate the ability to apply theories and principles to address complex ethical issues related to health care delivery and administration.

**PBHL-H 475 Health Services Management Capstone (3 cr.)** P: Prerequisite: PBHL-H 200 with "C" or better or BUS-A 201 with "C" or better or BUS-A 200 with "C" or better. This course will emphasize the application of knowledge gained in the in the major to real health care scenarios. Additionally, students will reflect on and evaluate their personal and professional growth and build

on their internship experiences to prepare themselves for the transition to professional life in a health care setting.

**PBHL-P 100 Topics in Public Health (1-3 cr.)** An introduction to public health disciplines, topics and issues.

**PBHL-P 109 Introduction to Public Health (3 cr.)**

Introduction to public health using Indianapolis as case study. Well-being, illness, injury, education, violence, housing, work, cultural and neighborhood variability will be examined to demonstrate the public health perspective on any situation and to see how the state of health in our city connects to the nation and the world.

**PBHL-P 200 Topics in Public Health (1-3 cr.)** An introduction to public health disciplines, topics and issues.

**PBHL-P 300 Topics in Public Health (1-3 cr.)** An introduction to public health disciplines, topics and issues.

**PBHL-P 450 Study Abroad: London (3 cr.)** This course provides an in-depth introduction to a global model for health services delivery and provides students with the opportunity to compare and contrast systems in England and the United States. Participants will spend substantial time out in the field visiting London-area health facilities, historical sites, and universities.

**PBHL-P 451 Study Abroad: Sweden (3 cr.)** This course provides an introduction to a globally admired model for health services delivery and provides students with the opportunity to compare and contrast systems in Sweden and the United States. Participants will spend substantial time out in the field visiting Stockholm-area health facilities, historical and cultural sites.

**PBHL-P 452 Study Abroad: Nicaragua (3 cr.)** This course provides an in-depth introduction to the health system in Nicaragua and provides students with the opportunity to compare and contrast systems in Nicaragua and the United States. Participants will spend substantial time out in the field visiting the Nicaraguan health facilities, historical and cultural sites and will participate in a service project constructing composting latrines to improve public and environmental health in the rural community of La Concepcion.

**PBHL-P 453 Study Abroad: Geneva (3 cr.)** This course provides students with an in-depth introduction to global organizations responsible for supporting health leadership and health systems strengthening worldwide. Participants will spend substantial time out in the field meeting health experts and mid- to senior-level managers and leaders.

**PBHL-P 457 Study Abroad: El Salvador (3 cr.)** This course provides an in-depth introduction to the health system in El Salvador and provides students with the opportunity to compare and contrast systems in El Salvador and the United States. Participants will spend substantial time out in the field visiting the El Salvadoran health facilities, historical and cultural sites and will participate in a service project constructing composting latrines to improve public and environmental health in the municipality of Suchitoto.

**PBHL-S 105 Movies, Music, and Public Health (3 cr.)**

This undergraduate course will expose students to a variety of public health issues portrayed in movies, music, and other media. Students will view and critically analyze a series of selected films, albums, television shows,

documentaries, podcasts, and readings relevant to current public health trends.

**PBHL-S 120 Introduction to Community Health (3 cr.)** This course offers students a basic introduction to community health. The class will present health issues with a focus on a community, not individual perspective; as a result, students will learn about public health approaches to health assessment, health promotion and disease prevention.

**PBHL-S 220 Navigating the Maze to Healthy Living (3 cr.)**

This course provides students with knowledge and understanding of factors influencing personal health, health behaviors, health promotion, and disease prevention. The course emphasizes lifestyles and personal decision making as a consumer of health and health care services.

**PBHL-S 222 This Stress is Killing Me: Stress And Its Effects On You (3 cr.)** This course will teach you all about stress and its effect on your body and mind. You will learn the biology of stress, factors that protect you from stress or make you more vulnerable to it and the experience of stress in various settings, such as work, family and community. You will also learn how to manage stress.

**PBHL-S 240 Peer Health Education and Leadership (3 cr.)**

Peer Health Education and Leadership will consist of classroom and online components. Students will be engaged with in-classroom workshops facilitated by the Office of Health and Wellness Promotion staff and campus partners, focused on content education and skills training. Students will also learn, discuss, and reflect with their peers in an online environment, building a foundational understanding of health and wellness topics and aspects of leadership development.

**PBHL-S 250 Social and Behavioral Dimensions of Public Health (3 cr.)** This course introduces students to the social and behavioral science principles that provide the foundation for how public health engages with people and communities to prevent disease and promote health. Students will explore topics that promote a broad understanding of determinants of health and the multiple factors contributing to health and illness.

**PBHL-S 303 Topics in Public Health (1-3 cr.)**

This course has a variable title and can be offered for variable credits. Similar to topics courses offered in other IUPUI programs, this course offers an introduction to a variety of public health topics and current issues will be covered in this course.

**PBHL-S 305 Careers in Public Health (3 cr.)** This undergraduate course will expose students to a variety of public health careers and provide skills necessary for identifying and obtaining a career in public health. Students will have the opportunity to interact with professionals from the private and public sectors who will introduce students to the many careers in public health and to the various roles and functions of public health professionals. Students will engage in professional development through various activities including developing a personal career plan, job seeking strategies,

resume design, and interview techniques to prepare them for professional careers.

**PBHL-S 315 Community Organizing for Health Promotion (3 cr.)** P: PBHL-S 120. Through this course, students will learn processes for community assessment, organizing, and advocacy. The course will address methods for strengthening communities to prevent and solve community health problems while building students' civic identity, leadership, and management skills.

**PBHL-S 325 Urban Angst.Suburban Blues: Public Mental Health (3 cr.)**

This course will examine how the mental health of communities is influenced by geopolitical influences, SES, neighborhood, safety, culture, environment, community and other elements external to the individual. Using textbooks, case study readings, and multimedia we will analyze causes of mental (dis)ease in the general public and develop a stronger understanding of how the outside world can impact the health of the mind.

**PBHL-S 330 THEORETICAL FOUNDATIONS OF COMMUNITY HEALTH (3 cr.)** This course will explore the theories of health behavior change that are used to develop health interventions for individuals and communities. Students will learn different theories, how to put them into practice, and how useful and practical they are for various populations and contexts.

**PBHL-S 337 Health Equity and Social Determinants of Health (3 cr.)** This course introduces students to an ecological perspective of health, going beyond biology and individual factors to investigate the influence on health of the social systems in which individuals live, work, learn, and play. Through the lens of social justice, students will examine how contemporary social issues influence populational differences in health (health disparities).

**PBHL-S 340 Cultural Considerations in the Promotion of Health (3 cr.)** In this course we will examine what is meant by culture, the ways in which culture intersects with health issues, and how public health efforts (domestic and global) can benefit by understanding and working with cultural processes.

**PBHL-S 349 Research Methods in Community Health (3 cr.)** P: PBHL-B 300 or permission of instructor; This course helps students develop an appreciation and understanding of the fundamental research methods used in community health and how to apply those methods to inform their work to improve the health of the community. The focus is on understanding how community - and personal - level data are collected and interpreted in scientifically valid ways. Students will become proficient consumers and users of published research and will be able to identify the strengths and limitations of the designs used, along with possible confounding factors and biases.

**PBHL-S 360 Assessment and Planning for Community Health Promotion (3 cr.)** P: PBHL-S 330 This course applies theory-based concepts and methods of health promotion focusing on needs assessment and intervention planning for individual and community health programs.

**PBHL-S 361 Implementation and Evaluation for Community Health Promotion (3 cr.)** P: PBHL-S 330 and PBHL-S 360 This course applies theory-based



concepts and methods of health promotion focusing on program funding, implementation, and evaluation for individual and community health programs.

**PBHL-S 415 Applied Health Promotion Methods (3 cr.)**

This course provides students with understanding, application, and practice of key methods in community health promotion including health communication, health education, health policy, and community mobilization strategies. Application of theory and implementation of methods at individual and community levels are addressed.

**PBHL-S 416 Health Promotion Applications (3 cr.)**

P: PBHL-S 361 This course provides students with opportunities to apply and practice key methods in community health promotion. Emphasis is on utilizing simulations, workshops, and training programs to acquire professional skills and certifications to expand the resume and professional portfolio.

**PBHL-S 422 Coaching for Health and Wellness (3 cr.)**

This course is designed to teach students how to coach individuals and groups attempting to improve their health behaviors. Theory, evidence-based practices, and different types of communication and interviewing styles will be explored through hands-on activities. Students will practice the learned techniques throughout the semester and will be able to apply these techniques upon completion of the course. Students planning to become health educators, health care providers, and others interested in guiding behavior change will benefit from this course.

**PBHL-S 460 Biosocial Approach to Global Health (3 cr.)**

The course will provide students with an opportunity to examine key global health issues using a biosocial justice perspective. Students will participate in authentic global health work as they will partner with MPH students from a university global partner to develop a strategic plan to address a global health issue. The course will require students to engage in analytical reading and discussions, and produce and deliver impactful written and oral communications.

**PBHL-S 469 Practicum in Community Health (3 cr.)**

P: PBHL-S 361, senior standing, permission; The course integrates academic elements and on-site work objectives in a 180-hour experience in an approved community health setting. The practicum provides students with observation and experience in a minimum of three of the responsibility areas outlined in the national Responsibilities and Competencies for Entry-Level Health Education/Promotion Specialists (NCHEC).

**PBHL-S 479 Internship in Community Health (3 cr.)**

P: PBHL-S 361, senior standing, permission; The course integrates academic elements and on-site work objectives in a 360-hour experience in an approved community health setting. The internship provides students with observation and experience in a minimum of four of the responsibility areas outlined in the national Responsibilities and Competencies for Entry-Level Health Education/Promotion Specialists (NCHEC).

**PBHL-S 499 Capstone Experience: BSPH in Community Health (3 cr.)**

P: Students must be in their last semester of the senior year. The capstone is a

culminating experience that pulls together and puts into practice the relevant knowledge from the undergraduate experience, and provides a stepping stone to the intended careers and/or next-level learning and educational pursuits. The capstone experience requires students to integrate the knowledge, skills, and dispositions acquired during their entire academic career as it connects to their discipline of study, reflect on personal growth and professional development, produce a tangible deliverable that requires a significant investment of time and effort, and share tangible deliverables with stakeholders.