The broad mission of public health is to enhance human health through preventing disease, and prolonging life among human populations; Public health is also defined as the art and science of promoting health, improving the health of communities. People can be healthy” (IOM, 1988). Public health activities focus on “…the fulfillment of society’s interest in assuring the conditions in which people can be healthy” (IOM, 1988). Public health involves the knowledge and application of many disciplines in its research, teaching, service, and practice activities, the following have been identified as fundamental, core areas to the practice of public health (CEPH Accreditation Criteria, 2011):

- Biostatistics - collection, storage, retrieval, analysis and interpretation of health data; design and analysis of health-related surveys and experiments; and concepts and practice of statistical data analysis;
- Environmental Health Sciences - environmental factors including biological, physical, and chemical factors that affect the health of a community;
- Epidemiology - distributions and determinants of disease, disabilities, and death in human populations; the characteristics and dynamics of human populations; and the natural history of disease and the biologic basis of health;
- Health Services Administration - planning, organization, administration, management, evaluation, and policy analysis of health and public health programs; and
- Community Health Education/Social and Behavioral Sciences - concepts and methods of social and behavioral sciences relevant to the identification and solution of public health problems.

The teaching, research, and service activities of the Jiann-Ping Hsu College of Public Health are grounded in these core public health disciplines in its research, teaching, service, and practice activities, the following have been identified as fundamental, core areas to the practice of public health (CEPH Accreditation Criteria, 2011):

- Biostatistics - collection, storage, retrieval, analysis and interpretation of health data; design and analysis of health-related surveys and experiments; and concepts and practice of statistical data analysis;
- Environmental Health Sciences - environmental factors including biological, physical, and chemical factors that affect the health of a community;
- Epidemiology - distributions and determinants of disease, disabilities, and death in human populations; the characteristics and dynamics of human populations; and the natural history of disease and the biologic basis of health;
- Health Services Administration - planning, organization, administration, management, evaluation, and policy analysis of health and public health programs; and
- Community Health Education/Social and Behavioral Sciences - concepts and methods of social and behavioral sciences relevant to the identification and solution of public health problems.

The Jiann-Ping Hsu College of Public Health (JPHCOPH) created January 2006 and accredited by the Council on Education for Public Health (CEPH). The College exists to provide public health education, research, and community service that will positively impact the quality of life and health disparities of rural and underserved populations. The establishment of the College was made possible by a generous gift from Dr. Karl E. Peace, in memory and honor of his wife, Dr. Jiann-Ping Hsu.

Vision
The Jiann-Ping Hsu College of Public Health will be the nationally recognized leader in the empowerment of rural communities and underserved populations to address public health issues, eliminate health disparities and improve health outcomes.

Mission
The mission of the Jiann-Ping Hsu College of Public Health is to improve health, eliminate health disparities and health inequities of rural communities and underserved populations globally through excellence in teaching, public health workforce development, research, scholarship, professional service and community engagement.

About Public Health
The Institute of Medicine (IOM) has defined the role of public health as “…the fulfillment of society’s interest in assuring the conditions in which people can be healthy” (IOM, 1988). Public health activities focus on improving the health of communities.

Public health is also defined as the art and science of promoting health, preventing disease, and prolonging life among human populations; the broad mission of public health is to enhance human health through organized community efforts (Council on Education for Public Health, 1978).

A diverse and ever-expanding field of practice, public health embraces an ecological approach that recognizes the interactions and relationships among multiple determinants of health. It involves the dissemination of reliable information for policy decisions; identifying systemic inequalities and problems; protecting the public’s health and safety through education and research; and fostering partnerships with individuals, communities, and organizations to promote health.

Though public health involves the knowledge and application of many disciplines in its research, teaching, service, and practice activities, the following have been identified as fundamental, core areas to the practice of public health (CEPH Accreditation Criteria, 2011):

- Biostatistics - collection, storage, retrieval, analysis and interpretation of health data; design and analysis of health-related surveys and experiments; and concepts and practice of statistical data analysis;
- Environmental Health Sciences - environmental factors including biological, physical, and chemical factors that affect the health of a community;
- Epidemiology - distributions and determinants of disease, disabilities, and death in human populations; the characteristics and dynamics of human populations; and the natural history of disease and the biologic basis of health;
- Health Services Administration - planning, organization, administration, management, evaluation, and policy analysis of health and public health programs; and
- Community Health Education/Social and Behavioral Sciences - concepts and methods of social and behavioral sciences relevant to the identification and solution of public health problems.

The teaching, research, and service activities of the Jiann-Ping Hsu College of Public Health are grounded in these core public health knowledge areas. Our goals for workforce development, community-based research and community-based service help us focus our efforts on cross disciplinary projects that build on the synergistic effects of these core knowledge areas.

Public health is concerned with protecting the health of communities, both small and large. Public health professionals focus on building on assets and preventing problems from happening or re-occurring through implementing educational programs, developing policies, administering services, and conducting research in concert with, but in contrast to, clinical health professionals (e.g., physicians and nurses) who focus primarily on treating individuals after they become sick or injured. No matter what form public health assumes, its goal is always the same: to improve the quality of life of individuals, families, and communities by focusing on prevention, promotion, and protection.

This preventive model encompasses three core functions:

1. assessing and monitoring the health of communities and at-risk populations to identify health problems and establish priorities;
2. formulating public policies in collaboration with community and government leaders designed to prioritize and solve local and national health problems; and
3. assuring that all populations have access to appropriate and cost-effective health care, including health promotion and disease prevention services, and evaluating the effectiveness of the care.

Our Shared Values
The Jiann-Ping Hsu College of Public Health is endowed by Dr. Karl E. Peace as a tribute to his wife and an enduring celebration of her life characterized by “a zeal for excellence, consideration of others,
intelligence and scholarship, honesty, kindness and humility.” In honor of Dr. Hsu, the faculty, students and staff of the JPHCOPH commit to demonstrate these values in our behavior toward one another and to those that we serve.

In 2007, the JPHCOPH students, faculty and staff worked together to clarify the following list of shared core values. These values serve to guide decision making for our workforce development, research, professional service and community engagement activities. We will also use these values to help us make choices about how to move forward when the path is not clear.

- Excellence in research, service and instruction.
- Passion for improving the health of rural communities and underserved populations.
- Responsibility for promoting health equity and eliminating health disparities in rural communities and underserved populations.
- Commitment to community involvement.
- Collaboration for problem solving.
- Commitment to developing as a “learning organization”.

Experiential Learning Opportunities

All M.P.H. students are required to complete a practicum experience and an integrated capstone experience. The practicum and capstone experience are both competency-based. The 300 hour in agency practicum provides the student the opportunity to further develop and integrate skills learned in the classroom. An electronic portfolio about the practicum is submitted at completion of the 300 hours. The capstone experience serves to facilitate problem solving skills through the integration of public health principles across all concentrations. Elements of these two experiences make up the culminating experience for the M.P.H.

All Dr.P.H. students are required to complete a preceptorship in Public Health, candidacy exams and a Dissertation. The preceptorship/field experience consists of 300 hours of field experience under the joint direction of a qualified specialist working in selected areas of public health. An electronic portfolio about the activities and outcomes of the experience is required upon completion of the preceptorship. Students must successfully pass a candidacy exam on the core and concentration competencies to begin the preceptorship and dissertation. The doctoral dissertation is a culminating experience that requires the student to synthesize and integrate knowledge and apply theory and principles learned to an area of public health practice within the area of concentration. The dissertation must also be presented and successfully defended before the faculty.

All M.H.A. students are required to complete an internship. The internship permits the student to receive practical experience in a selected health-related setting. The internship requires 300 hours of service. A culminating experience highlighting this learning opportunity is required prior to completion of the M.H.A. program. As a culminating experience, all M.H.A. internship students must complete and present an expanded electronic portfolio of the activities and outcomes of the internship.

Advisement

Graduate students are advised by the Coordinator of Student Services and mentored by a faculty member from the Student’s concentration area.

Doctoral Degrees


Master Degrees


Certificates


Concentrations

PUBH 5520G Introduction to Public Health
2 Credit Hours. 2 Lecture Hours. 0 Lab Hours.
This course is designed to give students a foundation in the core functions of the population-based public health (assessment, policy development and assurance). In addition, this course will examine the 10 essential services of public health within these core functions. Defining effective public health practice and providing knowledge about the technical, social, and political parameters related to public health research and practice are goals for this class. Students will gain an understanding of public health as a broad area of work that applies the benefits of current biomedical, environmental, social, and behavioral knowledge in ways that maximize the health status of all populations.
Cross Listing(s): PUBH 5520.

PUBH 6532 Environmental Health
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
This course is a survey of specific environmental conditions and factors that contribute to the development of health problems in communities. Health effects, policy issues, intervention strategies and control programs for community environmental health protection are discussed.

PUBH 6533 Epidemiology
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
This course provides an introduction to many important topics in epidemiology for public health practice, including but not limited to the evolution of the discipline, causal concepts in the natural history of disease, critical features of infectious and chronic diseases, elements of public health screening, basic measures used in epidemiology, design of epidemiologic investigations, consideration of random error and systematic bias, calculation and interpretation of confidence intervals and p values, discussion of confounding and interaction, criteria for evaluation of cause and effect relationships and the implications for ethical public health practice. Students are expected to gain a foundation for the application of epidemiologic methods for exploration of the causes and conditions that influence the origin, propagation, mitigation, and prevention of diseases in population health.

PUBH 6534 Health Policy and Management
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
The course provides a comprehensive introduction and overview to public health management and administration. The course context is based on managerial decision making and the practical knowledge, tools, processes and strategies required by organizational management. This course overviews the basics of administration, including public health law, human resources management, budgeting and financing, health information management, performance measurement and improvement, ethics, leadership, communication, media relations, and legislative relations in public health; introduced as processes are strategic planning, program development and evaluation, budget preparation, and constituency building for collaboration. Emerging areas of public health policy and management are also discussed as contexts to apply practical knowledge, tools and strategies.

PUBH 6535 Social and Behavioral Sciences and Public Health
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
This course is designed to familiarize students with the history and current applications of social and behavioral sciences as they are applied to public health practice and research. It explores social and behavioral science models, theories, and approaches that inform public health, and their philosophical roots. The course also examines social and behavioral determinants of health equity across the ecological spectrum. Emphasis is placed on critical thinking skills to help students synthesize and utilize information in research and practice. An important contribution of this course is the emphasis on recognizing the contributions of social and behavioral science research and practice to enhanced public health.

PUBH 6541 Biostatistics
4 Credit Hours. 3 Lecture Hours. 2 Lab Hours.
This course examines statistics in public health and related health sciences, including sampling, probability, basic discrete and continuous distributions, descriptive statistics, hypotheses testing, confidence intervals, categorical data analysis, regression, and correlation. Emphasis will be on the development of critical thinking skills and health data analysis applications with computer software.
Cross Listing(s): BIOS 6541.

PUBH 7090 Selected Topics in Public Health
1-3 Credit Hours. 1-3 Lecture Hours. 0 Lab Hours.
Allows the student the opportunity to receive specialized and/or focused instruction in a public health topic not generally offered by the department.
Cross Listing(s): PUBH 7090S.

PUBH 7090S Selected Topics in Public Health
1-3 Credit Hours. 1-3 Lecture Hours. 0 Lab Hours.
Allows the student the opportunity to receive specialized and/or focused instruction in a public health topic not generally offered by the department.
Cross Listing(s): PUBH 7090.

PUBH 7131 Continuous Quality Improvement
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
This course will use Statistical Process Control and Quality Improvement (QI) techniques to address the pressing need for the adoption of quality improvement methods and techniques in public health today. The course also includes an overview of health quality initiatives in general and the progress of QI in public health systems.

PUBH 7530 Integrated Capstone Experience
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
This course serves as a culminating experience designed to promote refinement of the hard and soft skills necessary for the public health workforce. Throughout the semester, students acquire skills in the integration of basic public health concepts and refine the application of discipline specific knowledge. This course relies on a case-based format that promotes problem solving and critical thinking in the context of real world public health problems.

PUBH 7790 Practicum in Public Health
1-4 Credit Hours. 0 Lecture Hours. 0 Lab Hours.
Permits the student to receive practical experience in a selected public health-related setting.
Prerequisite(s): Permission of instructor.
Cross Listing(s): PUBH 7790S.

PUBH 7790S Practicum in Public Health
1-4 Credit Hours. 0 Lecture Hours. 0 Lab Hours.
Permits the student to receive practical experience in a selected public health-related setting.
Prerequisite(s): Permission of instructor.
Cross Listing(s): PUBH 7790.

PUBH 7890 Directed Individual Study
1-3 Credit Hours. 1-3 Lecture Hours. 0 Lab Hours.
Provides the student with an opportunity to investigate an area of interest under the direction of a faculty mentor.

PUBH 7991 Public Health Capstone Research Project
1-3 Credit Hours. 0 Lecture Hours. 0 Lab Hours.
Requires the completion of an independent research project in the preferred field requiring the defense of the design, methods, analysis, and interpretation of the data. MPH Students may register for more than 3 credits of PUBH 7991 while working on their Capstone Research Project, but only 3 credits of PUBH 7991 may be applied toward the degree requirements. Excess PUBH 7991 credits cannot be used for electives or required coursework. Extra (greater than 3) credits of PUBH 7991 will simply increase the number of credits the student earns to more than 45.
Cross Listing(s): PUBH 7991S.
PUBH 7991S Public Health Capstone Research Project
3 Credit Hours. 0 Lecture Hours. 0 Lab Hours.
Requires the completion of an independent research project in the preferred field requiring the defense of the design, methods, analysis, and interpretation of the data. MPH Students may register for more than 3 credits of PUBH 7991 while working on their Capstone Research Project, but only 3 credits of PUBH 7991 may be applied toward the degree requirements. Excess PUBH 7991 credits cannot be used for electives or required coursework. Extra (greater than 3) credits of PUBH 7991 will simply increase the number of credits the student earns to more than 45.
Cross Listing(s): PUBH 7991.

PUBH 7999 Thesis
1-6 Credit Hours. 0 Lecture Hours. 0 Lab Hours.
Requires the completion of an independent research project in the preferred field requiring the defense of the design, methods, analysis and interpretation of the data.

PUBH 8130 Advanced Topics in Biostatistics
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
This course provides an overview of advanced biostatistical descriptive and inferential methods including multiple regression, logistic regression, longitudinal data, survival analysis, and repeated measures with applications to public health and biomedical studies. Emphasis will be placed on developing statistical reasoning and critical thinking skills in addition to programming skills using statistical software (SAS) to analyze public health and biomedical data.

PUBH 8132 Environmental and Occupational Health
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
This course is designed to reinforce basic concepts of environmental and occupational health. Students will be exposed to the current impact of potential environmental and occupational health and safety hazards. Students will also be exposed to current concepts associated with environmental and occupational regulatory standards, assessment protocols, sampling and monitoring techniques, and remediation strategies.
Corequisite(s): PUBH 8134.

PUBH 8133 Epidemiologic Methods
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
An advanced epidemiology class designed to reinforce epidemiological concepts, as well as build a foundation for epidemiologic research in public health practice. Specific course content includes observational and experimental epidemiologic research methods. Emphasis will also be placed on appropriate analytic techniques necessary for biostatistical inference.

PUBH 8134 Health Economics, Policy and the Political Process
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
Foundational economic and specific health economic theory, trends, market issues, and applications are presented to include health insurance and payment theories, processes, and applications. Comparison between rational and irrational theory is explored. Evolution of health policy, considering past, current and future major legislation and executive directives, are explored within the political process.
Corequisite(s): PUBH 8132.

PUBH 8136 Theoretical Perspectives of the Social and Behavioral Sciences in Public Health
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
This course will explore social and behavioral science theories, models, and approaches that inform public health research and practice, as well as their philosophical foundations. With emphasis on an ecological perspective, students will apply relevant theories to understanding community health issues and to developing interventions. The course also examines social and behavioral determinants of health equity across the ecological spectrum. In this course students will gain an enhanced understanding of the contributions of the social and behavioral sciences to Public Health.

PUBH 8130 Sampling Methodology
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
This course focuses on study design and sampling methods as well as data analysis of small and large, national and local health surveys and vital statistics in order to gain experience describing data using effective graphical and numerical methods. Students will use statistical software (SAS) to analyze data originating from various national surveys such as the National Crime Victimization Survey, National Survey of Drug Use and Health, National Assessment of Educational Progress, Behavioral Risk Factor Surveillance System, an NHANES. Students will be introduced to sampling design, methods of data collection, nonresponse, writing and evaluating questions and answers in surveys, survey interviews, processing survey data and principles and practices related to ethical research.
Prerequisite(s): A minimum grade of "B" in PUBH 8130.

PUBH 9132 Community-Based Research in Public Health
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
This course will familiarize students with concepts, issues, and skills needed to conduct community-based Public Health research. Emphasis will be placed on utilizing qualitative, quantitative, and mixed methods within an ecological theoretical framework. Students will gain an understanding of the Community-Based Participatory Research (CBPR) approach, amongst others. Power-based issues in research relationships and the ethics of community-based research will be discussed. Students will learn advocacy skills to catalyze community-level intervention and structural change based on research findings.
Prerequisite(s): A minimum grade of "B" in PUBH 8132 and PUBH 8134.
Corequisite(s): PUBH 9135.

PUBH 9135 Public Health, Funding and Grantsmanship
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
This course will review the major sources of funding for public health programs, including public and private sources, and the components of successful funding proposals. Students will gain experience in writing funding proposals and creating program budgets. Students will learn appropriate techniques to planning and writing research grants for large-scale and small-scale community projects. As a part of this process, students will learn effective means of locating and soliciting funding agencies responsible for financing public health activity.
Prerequisite(s): A minimum grade of "B" in PUBH 8132 and PUBH 8134.
Corequisite(s): PUBH 9132.

PUBH 9630 Public Health Doctoral Seminar
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
This course is designed to give doctoral candidates the opportunity to determine and refine their dissertation research topics including identifying potential dissertation committee members particularly the chair.

PUBH 9790 Doctoral Preceptorship in Public Health
1-3 Credit Hours. 0 Lecture Hours. 0 Lab Hours.
The doctoral preceptorship/field experience consists of 300 hours of field experience under the joint direction of a public health faculty member and a qualified specialist working in selected areas of public health. A written report specifying activities, products, and outcomes of the experience is required upon completion of the preceptorship.
Cross Listing(s): PUBH 9790S.

PUBH 9790S Doctoral Preceptorship in Public Health
1-6 Credit Hours. 0 Lecture Hours. 0 Lab Hours.
The doctoral preceptorship/field experience consists of 300 hours of field experience under the joint direction of a public health faculty member and a qualified specialist working in selected areas of public health. A written report specifying activities, products, and outcomes of the experience is required upon completion of the preceptorship.
Cross Listing(s): PUBH 9790.
PUBH 9999 Dissertation
1-9 Credit Hours. 0 Lecture Hours. 0 Lab Hours.
The doctoral dissertation is a culminating experience that requires the student to synthesize and integrate knowledge and apply theory and principles learned to an area of public health practice within the area of concentration. A written product must be submitted and must take the form of a manuscript that is suitable for publication in a national-level public health journal, a grant proposal, a technical report, a case analysis, or other similar document. The dissertation must also be presented and successfully defended before the faculty.