

# Program in Public Health

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653 East Peltason Drive, Irvine, CA 92697  
Undergraduate Advising: 949-824-2358

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856 Medical Sciences Quad, Irvine, CA 92697  
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<http://publichealth.uci.edu/>

## Program in Public Health

**Bernadette Boden-Albala, MPH, DrPH**

### Director and Founding Dean, Program in Public Health

The Program in Public Health was established in 2003 to advance the collaborative interdisciplinary mission of public health research, education, and service with the end goal of enhancing health and wellbeing locally, nationally, and domestically.

The undergraduate degree programs in public health began enrolling students in 2006. The Program in Public Health offers a B.S. in Public Health Sciences, a B.A. in Public Health Policy, a minor in Public Health, a minor in Global Health, a Master of Public Health (M.P.H.) in four emphases: Biostatistics, Environmental Health, Epidemiology, and Sociocultural Diversity and Health.

The Department of Epidemiology and Biostatistics offers a Doctor in Philosophy in Epidemiology (Ph.D.) and an M.S. in Epidemiology. Faculty provide guidance on curricular and programmatic activities for the M.P.H. in Epidemiology.

The Department of Environmental and Occupational Health offers an M.S. and a Ph.D. in Environmental Health Sciences. There are two tracks offered in both degree programs: Environmental Toxicology, and Exposure Sciences and Environmental Epidemiology. Faculty provide guidance on curricular and programmatic activities for the M.P.H. in Environmental Health.

The Department of Health, Society, and Behavior Faculty provide guidance on curricular and programmatic activities for the M.P.H. in Sociocultural Diversity and Health, and jointly manage the Ph.D. in Public Health with the Department of Population Health and Disease Prevention.

The Department of Population Health and Disease Prevention offers a Doctor of Philosophy (Ph.D.) in Public Health in two concentrations: Disease Prevention and Global Health, which is jointly administered with the Department of Health, Society, and Behavior. The program also offers a dual-degree M.D./M.P.H., a concurrent J.D./M.P.H. with the School of Law, a concurrent J.D./Ph.D. with the School of Law, and a joint Doctor of Philosophy (Ph.D.) in Environmental Health Sciences with the School of Medicine.

The Program is fully accredited by the Council on Education for Public Health (<http://ceph.org/>). The Program is also a member of the Association of Schools and Programs of Public Health.

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## Honors

### Honors Research Program in Public Health

The Public Health Honors Program provides an opportunity for selected outstanding students in the program to pursue advanced work in independent research and earn honors in Public Health upon graduation. Successful completion of the honors program requires three quarters of commitment, while enrolled in PUBHLTH H192A-PUBHLTH H192B-PUBHLTH H192C. Students are also expected to enroll in supervised Undergraduate Research (PUBHLTH 199) with their research mentor. The program concludes with a presentation and submission of an honors culminating thesis.

### Eligibility and Application Process

In order to be considered, a student must have satisfied the following requirements: completion of all lower-division Public Health courses required for the major; completion of at least five upper-division Public Health courses; an overall UCI grade point average of a minimum of 3.5; and a minimum 3.5 grade point average in all required and completed Public Health courses. Acceptance into the program is based upon evidence of the student's ability, interest in research, and proposed thesis project with a faculty member.

Admission to the program is based on formal invitation and/or an application to participate in the Public Health Honors Program submitted by the student in the spring quarter of the junior year.

### Requirements

Beyond fulfilling the regular courses required for either the Public Health Sciences or Public Health Policy major, honor students must take the following:

|                   |   |
|-------------------|---|
| A. Fall Quarter   |   |
| PUBHLTH H192A     | Public Health Honors Seminar and Thesis I (4 units)   |
| PUBHLTH 199       | Undergraduate Research (4 units)                      |
| B. Winter Quarter |   |
| PUBHLTH H192B     | Public Health Honors Seminar and Thesis II (4 units)  |
| PUBHLTH 199       | Undergraduate Research (4 units)                      |
| C. Spring Quarter |   |
| PUBHLTH H192C     | Public Health Honors Seminar and Thesis III (4 units) |
| PUBHLTH 199       | Undergraduate Research (4 units)                      |

### Graduation with Honors

Of the graduating seniors, no more than 16 percent will receive Latin honors: approximately 2 percent *summa cum laude*, 4 percent *magna cum laude*, and 10 percent *cum laude*. The selection for these awards is based on spring quarter rank-ordered grade point averages. To be eligible for honors at graduation, the student must, by the end of spring quarter of the senior year, be officially declared a Public Health major; submit an Application to Graduate by the end of winter quarter of the senior year; have completed at least 72 units in residence at a UC campus by the end of the spring quarter of the academic year in which they graduate; have all corrections to the academic record processed by the University Registrar's Office by the end of spring quarter; if completing the Language Other Than English general education requirement with a language exemption test, pass the test by the end of spring quarter; and be able to verify completion of all course work by the end of the spring quarter of the senior year. For information on other important factors that are considered, please visit at Honors Recognition (<http://catalogue.uci.edu/honors/>).

### Campuswide Honors Collegium

The Campuswide Honors Collegium is available to selected high-achieving students from all academic majors from their freshman through senior years. For more information contact the Campuswide Honors Collegium, 1200 Student Services II; 949-824-5461; [honors@uci.edu](mailto:honors@uci.edu); <http://www.honors.uci.edu/>.

### Dean's Honor List

The quarterly Dean's Honor List is composed of students who have received a 3.5 grade point average while carrying a minimum of 12 graded units.

### Public Health Honors, Scholarships, Prizes, and Awards

The following honors, scholarships, prizes, and awards are presented at the annual Public Health Honors and Awards Ceremony held in June.

**Academic Excellence.** This award is given to any student within the Program in Public Health, who graduates with a cumulative 4.0 UCI GPA.

**Excellence in Public Health Practicum.** This award recognizes a student whose project in public health practice contributes to the improvement of health and makes a significant contribution to public health.

**Excellence in Public Health Research.** This award is for research conducted by a student that is exceptional in quality.

**Excellence in Undergraduate Leadership.** This award recognizes a student who has demonstrated exemplary leadership in their execution of student activities that furthers the mission of the Program in Public Health, or the University of California, Irvine. This student has taken key leadership roles, inspired others to contribute, developed new programs to support students, and built relations that enable and grow the broader public health community.

**Excellence in Writing.** This award honors students who best demonstrate an ability to communicate ideas clearly through writing.

**Outstanding Contribution to Public Health, Community and UCI Service.** This award is given to an undergraduate who has made a significant contribution to the Public Health community, including the intellectual growth of others. This award signifies any work/research done by a student that benefits the campus community or the community-at-large.

**Outstanding Contribution to the Program in Public Health.** This award is presented to an outstanding undergraduate who has impacted and contributed significantly to the Program in Public Health.

**Recognition of Preceptors.** This award goes to nominated Practicum Preceptor Sites who have shown an outstanding commitment to UCI students or have been nominated for the award by student recognition.

**Special Recognition.** This award is given to undergraduates who deserve special recognition.

- Department of Environmental and Occupational Health
- Department of Epidemiology and Biostatistics
- Department of Health, Society, and Behavior
- Department of Population Health and Disease Prevention

## Requirements for the Bachelor's Degree

All Program in Public Health students must complete the following requirements.

**All students must meet the University Requirements (<http://catalogue.uci.edu/informationforadmittedstudents/requirementsforabachelorsdegree/>).**

### Program Requirements:

**Grade Requirement:** A minimum grade point average of at least C (2.0) is required (1) overall, (2) in all courses required for the major program, (3) in the upper-division courses required for the major, and (4) in PUBHLTH 195W.

**Residence Requirement:** After matriculation, all Public Health courses required for the major must be successfully completed at UCI. The Program in Public Health strictly enforces the UCI residence requirement. At least 36 of the final 45 units completed by a student for the bachelor's degree must be earned in residence at the UCI campus. (The Program considers courses taken in the Education Abroad Program to be in-residence courses.)

**Normal Progress:** Students in the Public Health Program are expected to make progress toward their degree, and their progress will be monitored. If normal academic progress toward the degree in Public Health is not being met, students will be subject to probation.

### Double Majoring and Minor

Second majors and/or minors will not be approved unless the student can complete both the degree and double major/minor(s) in their allotted time permitted at UCI. Students must be in good standing and not on academic probation for acceptance as a double major/minor(s).

Students may not enter as a double major, but Public Health students interested in other areas may apply for a double major after their first quarter, if the Public Health Program approves.

### Overlap Restrictions

**Double Majoring in Public Health Sciences and Public Health Policy.** Students may double major in Public Health Sciences and Public Health Policy; however there are only seven courses that may overlap between the two majors. Students may overlap PUBHLTH 1, PUBHLTH 2, PUBHLTH 101, MATH 2A, MATH 2B, STATS 7 or STATS 8, and PUBHLTH 195W. There are no other courses that can count for both majors.

**Other Double Majors.** In fulfilling degree requirements for multiple majors, a maximum of two courses may overlap between any two majors.

**Major and Minor Requirements.** In fulfilling minor requirements, a maximum of two courses may overlap between a major and minor. No course overlap is permitted between minors.

Students may not double major in Public Health Sciences, Pharmaceutical Sciences, Nursing Science, Biomedical Engineering: Premedical, or with any of the School of Biological Sciences majors or minors.

- Environmental Health Sciences, M.S.
- Environmental Health Sciences, Ph.D.
- Epidemiology, M.S.
- Epidemiology, Ph.D.
- Global Health, Minor
- M.D./M.P.H. Dual Degree Program
- Master of Public Health
- Public Health Policy, B.A.
- Public Health Sciences, B.S.
- Public Health, M.S.
- Public Health, Minor
- Public Health, Ph.D.

## Faculty

Alpesh N. Amin, M.D. M.B.A. Northwestern University, *Department Chair and Thomas and Mary Cesario Endowed Chair in Medicine and Professor of Medicine; Biomedical Engineering; Paul Merage School of Business; Population Health and Disease Prevention; Radiological Sciences*

Scott Bartell, Ph.D. University of California, Davis, *Professor of Environmental and Occupational Health; Health, Society, and Behavior; Population Health and Disease Prevention; Statistics*

Manijeh Berenji, M.D., M.P.H. University of Toledo, *Health Sciences Assistant Clinical Professor of Environmental and Occupational Health*

Hans-Ulrich Bernard, Ph.D. University of Goettingen, *Professor Emeritus of Molecular Biology and Biochemistry; Population Health and Disease Prevention*

- Zuzana Bic, Dr.P.H., M.U.Dr. (MD) Loma Linda University, *Professor of Teaching of Population Health and Disease Prevention*
- Bernadette Boden-Albala, M.P.H., *Director and Founding Dean and Professor of Health, Society, and Behavior; Epidemiology and Biostatistics*
- Stephen C. Bondy, Ph.D. University of Birmingham, *Professor of Medicine; Environmental and Occupational Health*
- Tim-Allen Bruckner, Ph.D. University of California, Berkeley, *Professor of Health, Society, and Behavior; Urban Planning and Public Policy*
- Bharath Chakravarthy, M.D. Boston University, *Clinical Professor of Emergency Medicine; Population Health and Disease Prevention*
- Jefferson Chan, M.D. Ph.D. University of California, San Francisco, *Professor of Pathology and Laboratory Medicine; Environmental and Occupational Health*
- Wayne Wei Chung Chang, M.D. Saint Louis University, *Health Sciences Clinical Professor of Medicine; Environmental and Occupational Health*
- Yunan Chen, Ph.D. Drexel University, *Associate Professor of Informatics; Population Health and Disease Prevention* (medical informatics, human computer interaction)
- Maria M. Corrada-Bravo, Sc.D. Johns Hopkins University, *Professor in Residence of Neurology; Epidemiology and Biostatistics*
- Wendy Cozen, D.O., Western University of Health Sciences M.P.H., University of California, Los Angeles, *Professor of Medicine; Epidemiology and Biostatistics; Pathology and Laboratory Medicine*
- Andrea De Vizcaya Ruiz, Ph.D. University of Surrey, *Associate Professor of Environmental and Occupational Health*
- Karen L. Edwards, Ph.D. University of Washington, *Department Chair and Professor of Epidemiology and Biostatistics; Population Health and Disease Prevention*
- Rufus D. Edwards, Ph.D. Rutgers, The State University of New Jersey, *Professor of Epidemiology and Biostatistics; Environmental and Occupational Health*
- Marion J. Fedoruk, M.D. University of Alberta, *Health Sciences Clinical Professor of Medicine; Environmental and Occupational Health*
- Dana Rose Garfin, Ph.D. University of California, Irvine, *Assistant Adjunct Professor of Nursing; Health, Society, and Behavior*
- Theodore Gideonse, Ph.D. University of California, San Diego, *Assistant Professor of Teaching of Health, Society, and Behavior*
- Daniel L. Gillen, Ph.D. University of Washington, *Department Chair and Professor of Statistics; Epidemiology and Biostatistics*
- Deborah Goodman-Gruen, M.D., Ph.D., M.P.H. University of California, Los Angeles, *Associate Adjunct Professor of Epidemiology and Biostatistics*
- Michele B. Goodwin, J.D. Boston College, *Director, Center for Biotechnology and Global Health Policy and UCI's Chancellor's Professor of School of Law; Criminology, Law and Society; Gender and Sexuality Studies; Population Health and Disease Prevention*
- Lisa B. Grant Ludwig, Ph.D. California Institute of Technology, *Professor of Population Health and Disease Prevention*
- Scott Hardy, M.D., M.P.H. Saint Louis University School of Medicine, *Health Sciences Clinical Professor of Environmental and Occupational Health; Program in Public Health*
- Suellen Hopfer, Ph.D. Pennsylvania State University, *Assistant Professor of Health, Society, and Behavior; Asian American Studies*
- Michael A. Hoyt, Ph.D. Arizona State University, *Associate Professor of Population Health and Disease Prevention; Epidemiology; Psychological Science*
- C. Sunny Jiang, Ph.D. University of South Florida, *Professor of Civil and Environmental Engineering; Ecology and Evolutionary Biology; Environmental and Occupational Health* (water pollution microbiology, environmental technology, aquatic microbial ecology)
- Kamyar Kalantar-Zadeh, M.D. University of Bonn, *Professor of Medicine; Pediatrics; Population Health and Disease Prevention*
- Alya Khan, M.D., M.S. Saba School of Medicine, *Health Sciences Assistant Clinical Professor of Environmental and Occupational Health; Medicine; Program in Public Health*
- Cynthia Lakon, Ph.D. University of North Carolina at Chapel Hill, *Interim Department Chair and Associate Professor of Health, Society, and Behavior*
- Alana Lebron, Ph.D. University of Michigan, *Assistant Professor of Health, Society, and Behavior; Chicano/Latino Studies*
- Charles L. Limoli, Ph.D. University of California, San Diego, *Professor of Radiation Oncology; Environmental and Occupational Health*

- Karen Lindsay, Ph.D. University College Dublin, *Susan and Henry Samuelli Endowed Chair in Integrative Health and Assistant Professor of Pediatrics; Population Health and Disease Prevention*
- Shahram Lotfipour, M.D. University of Iowa, *Professor of Emergency Medicine; Population Health and Disease Prevention*
- Yunxia Lu, Ph.D. University Tongi Medical College, *Associate Professor of Population Health and Disease Prevention; Epidemiology and Biostatistics*
- Ulrike Luderer, M.D., Ph.D. Northwestern University, *Professor of Medicine; Developmental and Cell Biology; Environmental and Occupational Health*
- Joel Milam, Ph.D. University of Southern California, *Professor of Epidemiology and Biostatistics*
- Brittany Morey, Ph.D. University of Californiam, Los Angeles, *Assistant Professor of Health, Society, and Behavior*
- Dana Mukamel, Ph.D. University of Rochester, *Professor of Medicine; Population Health and Disease Prevention*
- Bin Nan, Ph.D. University of Washington, *Professor of Statistics; Epidemiology and Biostatistics*
- Trina M. Norden-Krichmar, Ph.D. University of California, San Diego, *Assistant Professor of Epidemiology and Biostatistics; Biological Chemistry; Computer Science; Pharmaceutical Sciences*
- Andrew Noymer, Ph.D. University of California, Berkeley, *Associate Professor of Population Health and Disease Prevention; Sociology*
- Andrew O. Odegaard, Ph.D. University of Minnesota, *Associate Professor of Epidemiology and Biostatistics*
- Oladele A. Ogunseitan, Ph.D. University of Tennessee, *UC Presidential Chair and Professor of Population Health and Disease Prevention; Environmental Health Sciences*
- Daniel Parker, Ph.D. The Pennsylvania State University, *Assistant Professor of Population Health and Disease Prevention; Epidemiology and Biostatistics*
- Denise D. Payan, Ph.D., M.P.P. University of Southern California, *Assistant Professor of Health, Society, and Behavior*
- Robert F. Phalen, Ph.D. University of Rochester, *Professor of Medicine; Environmental and Occupational Health*
- Connie Rhee, M.D. Northwestern University, *Associate Professor of Medicine; Population Health and Disease Prevention*
- David Richardson, Ph.D. University of North Carolina at Chapel Hill, *Associate Director of Research and Professor of Environmental and Occupational Health*
- Jenna Riis, Ph.D. Johns Hopkins University, *Assistant Professor of Psychological Science; Population Health and Disease Prevention (early life adversity; stress; salivary bioscience; neuroendocrine-immune relations; program implementation and evaluation)*
- Anamara Ritt-Olson, Ph.D. University of Southern California, *Associate Professor in Residence of Health, Society, and Behavior*
- Annie E. Ro, Ph.D. University of California, Los Angeles, *Associate Professor of Health, Society, and Behavior; Asian American Studies*
- Dylan H. Roby, Ph.D. George Washington University, *Associate Professor of Health, Society, and Behavior*
- Miryha Gould Runnerstrom, Ph.D. University of California, Irvine, *Associate Professor of Teaching of Health, Society, and Behavior*
- Roxane C. Silver, Ph.D. Northwestern University, *Professor of Psychological Science; Population Health and Disease Prevention (coping with traumatic life events (personal losses and collective traumas), stress, social psychology, health psychology)*
- Dara H. Sorokin, Ph.D. University of California, Irvine, *Associate Professor in Residence of Medicine; Population Health and Disease Prevention*
- Sharon M. Stern, Ph.D. University of Utah, *Professor of Teaching Emerita of Population Health and Disease Prevention*
- Elani Streja, M.P.H. Ph.D. University of California, Los Angeles, *Assistant Professor in Residence of Medicine; Population Health and Disease Prevention*
- Bryan Sykes, Ph.D. University of California, Berkeley, *Associate Professor of Criminology, Law and Society; Population Health and Disease Prevention; Sociology (demography, criminology, research methods, health, social inequality, statistics)*
- Sora P. Tanjasiri, Ph.D. University of California, Los Angeles, *Professor of Epidemiology and Biostatistics; Asian American Studies; Health, Society, and Behavior*
- Thomas Taylor, Ph.D. Stony Brook University New York, *Lecturer of Epidemiology and Biostatistics*

David Timberlake, Ph.D. University of California, San Diego, *Associate Professor of Population Health and Disease Prevention; Epidemiology and Biostatistics*

Elaine Tonel, D.O. Western University of Health Sciences, *Health Sciences Assistant Clinical Professor of Environmental and Occupational Health*

Leigh Turner, Ph.D. University of Southern California, *Professor of Health, Society, and Behavior*

Kristina Uban, Ph.D. University of British Columbia, *Assistant Professor of Health, Society, and Behavior*

Veronica M. Vieira, D.Sc. Boston University, *Department Chair and Professor of Environmental and Occupational Health; Environmental Health Sciences*

Lari B. Wenzel, Ph.D. Arizona State University, *Professor of Medicine; Population Health and Disease Prevention*

Dominik Wodarz, Ph.D. Oxford University, *Professor of Population Health and Disease Prevention; Mathematics*

Nathan D. Wong, Ph.D. Yale University, *Adjunct Professor of Medicine; Population Health and Disease Prevention*

Jun Wu, Ph.D. University of California, Los Angeles, *Professor of Environmental and Occupational Health; Population Health and Disease Prevention*

Guiyun Yan, Ph.D. University of Vermont, *Professor of Population Health and Disease Prevention; Ecology and Evolutionary Biology*

Zhaoxia Yu, Ph.D. William Marsh Rice University, *Associate Professor of Statistics; Epidemiology and Biostatistics*

Marnie Dobson Zimmerman, Ph.D. University of California, Irvine, *Assistant Adjunct Professor of Environmental and Occupational Health*

## Public Health Courses

### **PUBHLTH 1. Principles of Public Health. 4 Units.**

Introduces the major concepts and principles of public health and the determinants of health status in communities. Emphasizes the ecological model that focuses on the linkages and relationships among multiple natural and social determinants affecting health.

Restriction: Nursing Science Majors have first consideration for enrollment. Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

(III)

### **PUBHLTH 2. Case Studies in Public Health Practice. 4 Units.**

Presents case studies in various themes of public health practice to demonstrate how the principles of public health were established and continue to evolve.

Prerequisite: PUBHLTH 1

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

(II)

### **PUBHLTH 7A. Public Health Statistics I. 4 Units.**

Introduces the development and application of statistical reasoning and methods in addressing, analyzing, and solving problems in public health, health care, and biomedical, clinical, and population-based research and practice.

Overlaps with SOCECOL 13, STATS 7, STATS 8, MGMT 7.

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

(Va)

### **PUBHLTH 7B. Public Health Statistics II. 4 Units.**

Introduces the development and application of statistical reasoning and methods in addressing, analyzing, and solving problems in public health, health care, and biomedical, clinical, and population-based research and practice.

Prerequisite: PUBHLTH 7A

Restriction: Public Health Majors only. Public Health Sciences Majors only. Public Health Policy Majors only.

(Va)

**PUBHLTH 10. Special Topics in Public Health . 2-4 Units.**

Introduction to emerging topics in public health. Topics addressed vary each quarter.

Repeatability: Unlimited as topics vary.

**PUBHLTH 30. Introduction to Urban Environmental Health. 4 Units.**

Study of natural and physical components of earth's environmental problems due to human activities. Topics include global air, water, soil, biodiversity, rainforests, energy, demographics, agriculture, and urbanization. Theme is sustainability. Integrated into the science are social, legal, and economic considerations.

(II)

**PUBHLTH 60. Environmental Quality and Health. 4 Units.**

Overviews how pollution in the environment affects human health. Topics are toxicology, epidemiology, risk assessment, water, food, air, radiation, pesticides, solid and hazardous waste. Included are interdisciplinary elements of environmental regulations, education, and consumer protection.

(II)

**PUBHLTH 80. AIDS Fundamentals. 4 Units.**

Considers the biological and sociological bases of the AIDS epidemic. Topics include the history of AIDS, current medical knowledge, transmission, risk reduction, and how the community can respond.

Same as BIO SCI 45.

(II)

**PUBHLTH 90. Natural Disasters. 4 Units.**

Natural disasters are natural Earth processes that adversely affect humans. Topics include tectonics, earthquakes, tsunamis, volcanoes, landslides, severe weather, flooding, coastal processes, wildfire, related topics, and use of GIS for hazard and risk assessment.

Overlaps with EARTHSS 17.

(II)

**PUBHLTH 91. Disparities in Health Care. 2-8 Units.**

Student participatory course practicing initiation, planning, and coordination of various speakers on the subject of Disparities in Health Care.

Grading Option: Pass/no pass only.

Repeatability: May be taken for credit for 8 units.

**PUBHLTH 100. Special Topics in Public Health. 4 Units.**

Studies in selected areas of public health. Topics addressed vary each quarter. Course may be offered online when topic is Public Health in the Corporate World.

Prerequisite: PUBHLTH 1

Repeatability: Unlimited as topics vary.

**PUBHLTH 101. Introduction to Epidemiology. 4 Units.**

The distribution of disease and injury across time, space, and populations. Covers basic concepts and methods of descriptive epidemiology including the natural history of disease, data, and indices of health.

Prerequisite: STATS 7 or STATS 8 or PUBHLTH 7 or PUBHLTH 7A

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

**PUBHLTH 102. Social Epidemiology. 4 Units.**

Overviews evidence linking environmental factors to mental and physical disorders including such variables as socioeconomic status, income inequality, work stress, job loss, social capital, location, and other demographic characteristics. Measurement and research design issues of both individual and aggregate levels.

Prerequisite: Recommended: (PSCI 9 or PSCI 11C or PSYCH 7A or PSYCH 9C) and SOCECOL 10 and SOCECOL 13.

Same as PSCI 183S.

Restriction: Psychological Science Majors have first consideration for enrollment. Psychology and Social Behavior Majors have first consideration for enrollment. Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment. Social Ecology Majors have first consideration for enrollment.

**PUBHLTH 105. Introduction to Health Informatics. 4 Units.**

Broad overview of medical informatics for students with varied backgrounds. Electronic medical records, online resources, mobile technologies, patient safety, and computational design. Legal, ethical, and public policy issues. Health systems management. Evaluation and fieldwork for health systems.

Prerequisite: WRITING 60 or WRITING 30 or WRITING 31 or HUMAN 1C or HUMAN H1C. WRITING 60 with a grade of C or better. WRITING 30 with a grade of C or better. WRITING 31 with a grade of C or better. HUMAN 1C with a grade of C or better. HUMAN H1C with a grade of C or better

Same as IN4MATX 171.

Restriction: Upper-division students only. Satisfactory completion of the Lower-Division Writing requirement.

**PUBHLTH 106. Project in Health Informatics. 4 Units.**

Students undertake significant quarter-long projects related to health informatics. Topics may include field evaluations of health care technologies, prototypes, iterative design, and system implementations.

Prerequisite: PUBHLTH 105 or IN4MATX 171

Same as IN4MATX 172.

**PUBHLTH 107. Epidemiology of Drug Use and Misuse. 4 Units.**

Applies epidemiologic concepts to the use and misuse of licit/illicit substances. Emphasizes descriptive aspects of drug use and determinants of progressing from experimental use to misuse. Assesses subgroups of abusers, risk factors, trends, and surveillance techniques for estimating drug prevalence.

Prerequisite: PUBHLTH 101

Restriction: Upper-division students only. Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

**PUBHLTH 115. Community, Social Justice, and Health Equity Research for Action. 4 Units.**

Focuses on community as a unit of identity, community, well-being, and social justice perspectives and initiatives to promote community health. Addresses community change and improvements in community well-being, with a focus on health equity research for action.

Prerequisite: PUBHLTH 1 or PUBHLTH 2 or CHC/LAT 61 or CHC/LAT 62 or CHC/LAT 63

Same as CHC/LAT 152B.

**PUBHLTH 119. Special Topics in Epidemiology and Genetics. 4 Units.**

Studies in selected areas of epidemiology and genetics. Topics addressed vary each quarter.

Prerequisite: PUBHLTH 1

Repeatability: Unlimited as topics vary.

**PUBHLTH 120. Nutrition and Global Health. 4 Units.**

Global issues related to nutrition and public health. Evaluation of nutritional risk factors associated with the development of chronic diseases and the role of nutritional medicine in prevention. Topics include food safety, communicable diseases, supplements, and regulatory issues.

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

**PUBHLTH 122. Health Policy. 4 Units.**

Considers social and economic aspects of health and disease in the United States. What are the proper roles of the individual, community, and government in improving health and health care? International comparisons will be made wherever possible.

Same as UPPP 170.

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment. Social Ecology Majors have first consideration for enrollment. Urban Studies Majors have first consideration for enrollment.

**PUBHLTH 125. Foundations of Community Health. 4 Units.**

A social ecological framework for understanding community health is presented. Measures of individual and community health are compared, and the influence of personal and environmental factors on individual, group, and population health is examined. Community health promotion strategies are discussed.

Same as UPPP 112.

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment. Social Ecology Majors have first consideration for enrollment. Urban Studies Majors have first consideration for enrollment.

**PUBHLTH 126. Public Health Law: Fundamentals in Action. 4 Units.**

Addresses the relationship of U.S. public health law to health systems at the individual and population levels. Examines legislative and judicial concepts and how they are applied to disease prevention strategies, health services, management, and policy.

**PUBHLTH 127. Public Health Programs for the Corporate World. 4 Units.**

International perspective on workplace health promotion. Strategies for developing programs to improve employee health and to decrease risks of chronic degenerative diseases. Case studies include assessment of employee health, program design, implementation, and evaluation. Emphasis on disease prevention.

**PUBHLTH 129. Public Health Administration. 4 Units.**

Examines historical aspects of public health administration including policies, procedures, trends, and development of organizations. Addresses information and skills necessary to succeed in public health leadership roles. Discusses strategic planning, collaborations, and ethical considerations for successful management in public health.

Prerequisite: PUBHLTH 1

Restriction: Upper-division students only. Public Health Policy Majors have first consideration for enrollment. Public Health Sciences Majors have first consideration for enrollment.

**PUBHLTH 132. American Public Policy. 4 Units.**

Focuses on the development and implementation of public policy in the United States. Lectures cover theoretical models of the policy process as well as significant problems facing contemporary American decision-makers.

Same as POL SCI 121G, SOC SCI 152C, UPPP 129.

**PUBHLTH 135. Medical Sociology. 4 Units.**

Current problems in U.S. health-care system and proposals for reform. Examines financial barriers to access; problem of patient dumping; underinsurance; prenatal and perinatal care; child services; preventative care and needs of the elderly; minorities; low-income people; undocumented.

Same as SOCIOL 154.

Restriction: Upper-division students only. Sociology Majors have first consideration for enrollment.

**PUBHLTH 138. Tobacco Control Policy. 4 Units.**

Examines the challenges that governments encounter in regulating the marketing, sales and acquisition, and use of tobacco products. Students assess the supply and demand for tobacco from the perspectives of the industry and consumer.

Restriction: Public Health Majors only. Public Health Sciences Majors only. Public Health Policy Majors only.

**PUBHLTH 139. Special Topics in Health Policy and Administration. 4 Units.**

Studies in selected areas of health policy and administration. Topics addressed vary each quarter.

Prerequisite: PUBHLTH 1

Repeatability: Unlimited as topics vary.

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

**PUBHLTH 141. Clinical Health Psychology. 4 Units.**

Behavioral role in etiology, treatment, and prevention of certain diseases. Behavioral intervention including biofeedback, stress-, pain-management, health habit counseling, and other skills to assist patients make cognitive, emotional, and behavioral changes needed to cope with disease or achieve better health.

Prerequisite: Recommended: PSCI 9 or PSCI 11C or PSYCH 7A or PSYCH 9C.

Same as PSCI 141H.

Restriction: Psychological Science Majors have first consideration for enrollment. Psychology and Social Behavior Majors have first consideration for enrollment. Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment. Social Ecology Majors have first consideration for enrollment.

**PUBHLTH 144. Health Behavior Theory. 4 Units.**

Introduces theoretical perspectives from the social sciences to understand health behavior from the vantage point of individuals, their interpersonal contacts, communities, and ecological contexts. Application of theory to public health problems is a central focus.

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

**PUBHLTH 146. Health Promotion Programs. 4 Units.**

Examines ecological perspectives of health promotion programs and risk factors related to mortality/morbidity. Analyzes effectiveness of health promotion strategies and issues in the existing healthcare systems in light of sociocultural beliefs and economical/political conditions.

Prerequisite: PUBHLTH 1

Restriction: Upper-division students only. Public Health Policy Majors have first consideration for enrollment. Public Health Sciences Majors have first consideration for enrollment.

**PUBHLTH 147. Drug Abuse and its Prevention. 4 Units.**

Theoretical and practical underpinnings of drug abuse and its prevention at the individual and population levels. Students practice developing drug abuse prevention schemes for specific populations. Recent developments in pharmacological and biobehavioral theories of drug dependence are explored.

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

**PUBHLTH 148. Public Health Communication. 4 Units.**

Theoretical underpinnings and practical applications of communication sciences in public health practice. Techniques of effective communication, including fear appeal and deterrence; social marketing; public-private partnerships; health service delivery; and outreach in rural and urban settings, and for international health strategies.

Prerequisite: PUBHLTH 1 and PUBHLTH 2

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

**PUBHLTH 150. Public Health and Wellness. 4 Units.**

Presents information about wellness from both science and policy perspectives in order to demonstrate the role of wellness in public health. Emphasizes the conditions that create wellness in the individual, the community, the nation, and the world.

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

**PUBHLTH 159. Special Topics in Social and Behavioral Health Science. 4 Units.**

Studies in selected areas of social and behavioral health sciences. Topics addressed vary each quarter.

Prerequisite: PUBHLTH 1

Repeatability: Unlimited as topics vary.

**PUBHLTH 161. Environmental Geology. 4 Units.**

Introduction to geologic principles and applications to environmental problems. Topics include: tectonic processes, earth materials, soils, river processes, groundwater, the coastal environment, slope failures, seismic hazards, mineral resources, and land-use evaluation based on geologic conditions. Examples from case studies.

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

**PUBHLTH 163. Introduction to Environmental Health Science. 4 Units.**

Focuses on processes of exposure to environmental toxins/agents and their impact to human health and the environment. Media transport, exposure assessment, susceptibility, behavior, and health effect of several toxins are discussed.

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

**PUBHLTH 167. Air Pollution, Climate, and Health. 4 Units.**

Introduction to how air pollutants are emitted into the atmosphere, how people are most exposed to air pollutants in developed and developing areas, physical and meteorological processes that affect transport, and the influence of air pollutants on global warming.

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

**PUBHLTH 168. Nuclear Environments. 4 Units.**

Understanding the impact of the nuclear age on the environment and human health through interrelated developments of nuclear power and nuclear weapons. The early years of weapon development, catastrophic environmental pollution, perils of nuclear power in the U.S. and Russia.

Same as INTL ST 122, SOCECOL E127.

(VIII)

**PUBHLTH 170. Introduction to Global Health. 4 Units.**

Provides a foundational interdisciplinary understanding of global health issues and their importance to various societal goals, including poverty reduction, economic productivity, and peace promotion. Covers major communicable and non-communicable diseases and demographic patterns of disease burden.

Prerequisite: PUBHLTH 1

(VIII)

**PUBHLTH 171. Human Exposure to Environmental Contaminants. 4 Units.**

Introduces origins of human's realization that chemicals in the environment may adversely affect health. Introduces the theory and principles of exposure assessment. Covers estimation of exposure, variability of measures, the way exposure assessment is incorporated into the risk-assessment paradigm.

**PUBHLTH 172. Climate Change and Disaster Management. 4 Units.**

Examines the social, economic, environmental, and health impacts of anthropogenic climate change through engaged learning that integrates practice and theory.

**PUBHLTH 173. Health and Global Environmental Change . 4 Units.**

Overview of scientific underpinnings of global environmental change and human health consequences. Provides an understanding of the fundamental dependency of human health on global environmental integrity. Encourages disciplinary cross-fertilization through interaction of students in environmental, health, and policy sciences.

Prerequisite: One upper-division course in environmental science, public health, environmental policy, and/or environmental management.

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

**PUBHLTH 174. Global Health Ethics. 4 Units.**

Provides a foundation for understanding and application of key issues.

(VIII)

**PUBHLTH 176. War and Public Health. 4 Units.**

Explores how war impacts public health both globally and domestically in the United States. Focus on the link between war and the burden that it ultimately places on physical, mental, environmental, and societal health as well as on health systems.

**PUBHLTH 177. Global Health Policy and Diplomacy. 4 Units.**

Fundamental principles and consequences of global health policy and diplomacy, including governance structure, functions, analysis, advocacy, and outcomes. Emphasizes practical application of multilateral policies for global health security and responses to transnational threats such as pandemics, climate, pollution, and migration.

**PUBHLTH 179. Special Topics in Environmental and Global Health Science. 4 Units.**

Studies in selected areas of environmental and global health sciences. Topics addressed vary each quarter.

Prerequisite: PUBHLTH 1

Repeatability: Unlimited as topics vary.

**PUBHLTH 180. Epidemiology of Infectious Disease. 4 Units.**

Examines the distribution of infectious disease and the health and disease risk among human populations. Introduces basic methods for infectious disease epidemiology. Case studies of important diseases, including HIV and malaria, are conducted.

Prerequisite: PUBHLTH 1

**PUBHLTH 181. Infectious Disease Dynamics. 4 Units.**

Learn how the immune system interacts with infectious diseases, in particular with viral infections. An introduction to basic virology and immunology, it concentrates on the way in which the immune system is critical to the prevention of infections.

Same as BIO SCI E124.

**PUBHLTH 182. Evolutionary and Ecological Principles in Medicine. 4 Units.**

Explore the dynamics of populations on an ecological, epidemiological, and medical level. Considers the dynamics of competition, predation, and parasitism; the spread and control of infectious diseases; and the in vivo dynamics of viral infections and the immune system.

Prerequisite: BIO SCI 93 or BIO SCI H93

Same as BIO SCI E151.

Concurrent with ECO EVO 251.

**PUBHLTH 189. Special Topics in Infectious Diseases. 4 Units.**

Studies in selected areas of infectious diseases. Topics addressed vary each quarter.

Prerequisite: PUBHLTH 1

Repeatability: Unlimited as topics vary.

Restriction: Public Health Sciences Majors have first consideration for enrollment. Public Health Policy Majors have first consideration for enrollment.

**PUBHLTH 190. Geographic Information Systems for Public Health. 4 Units.**

Provides a broad introduction to the use of Geographic Information Systems software to carry out projects for visualizing and analyzing spatial data to address significant issues of health care and policy-planning.

Concurrent with PUBHLTH 283.

**PUBHLTH 191A. Seminar: Advances and Challenges in Public Health. 2 Units.**

Forum for exploring recent advances and challenges in all disciplines of public health research and practice. Features case studies exemplifying the integration of core competencies with cross-cutting interdisciplinary themes of public health.

Grading Option: Pass/no pass only.

Concurrent with PUBHLTH 291A.

**PUBHLTH 191B. Seminar: Advances and Challenges in Public Health. 2 Units.**

Forum for exploring recent advances and challenges in all disciplines of public health research and practice. Features case studies exemplifying the integration of core competencies with cross-cutting interdisciplinary themes of public health.

Grading Option: Pass/no pass only.

Concurrent with PUBHLTH 291B.

**PUBHLTH 191C. Seminar: Advances and Challenges in Public Health. 2 Units.**

Forum for exploring recent advances and challenges in all disciplines of public health research and practice. Features case studies exemplifying the integration of core competencies with cross-cutting interdisciplinary themes of public health.

Grading Option: Pass/no pass only.

Repeatability: May be repeated for credit unlimited times.

Concurrent with PUBHLTH 291C.

**PUBHLTH H192A. Public Health Honors Seminar and Thesis I. 4 Units.**

Provides an opportunity for selected students to pursue advanced work in research and earn Public Health Honors. Students will conduct their honors research project with faculty through lectures, guest speakers, creating timelines and assignments.

Corequisite: PUBHLTH 199

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only. Public Health Policy Majors only. Public Health Sciences Majors only.

**PUBHLTH H192B. Public Health Honors Seminar and Thesis II. 4 Units.**

Students initiate and complete data collection for the honors thesis. In addition, students begin data analysis and summarize results at a class symposium at the end of the quarter. A faculty mentor provides supervision and feedback on thesis chapters.

Corequisite: PUBHLTH 199

Prerequisite: PUBHLTH H192A

Grading Option: Pass/no pass only.

Restriction: Public Health Policy Majors only. Public Health Sciences Majors only.

**PUBHLTH H192C. Public Health Honors Seminar and Thesis III. 4 Units.**

Students write their honors research project (PUBHLTH H192A-PUBHLTH H192B) and prepare an oral report to be presented at a class symposium at the end of the quarter. A faculty mentor provides supervision and feedback on thesis chapters.

Corequisite: PUBHLTH 199

Prerequisite: PUBHLTH H192B

Restriction: Public Health Policy Majors only. Public Health Sciences Majors only.

**PUBHLTH 193. Ethics and Responsible Conduct of Research in Public Health. 4 Units.**

Issues of scientific integrity and satisfies the requirements for training in public health ethics. Includes guidelines for responsible conduct of research, federal and international codes, administrative review and approval, conflict of interest, and privacy and safety of research participants. Course may be offered online.

Restriction: Upper-division students only. Public Health Sciences Majors only. Public Health Policy Majors only.

**PUBHLTH 194A. Clinical and Translational Research Preparatory I. 4 Units.**

Provides training for students with an interest in clinical and translational research in the health care setting. Cultivates skills for study design, research literature review, ethics, responsible conduct of research, and cultural competence while emphasizing professionalism and personal responsibility.

Prerequisite: BIO SCI 99 and BIO SCI 194S and CHEM 1C and CHEM 1LC and CHEM 1LD. Satisfactory completion of the Lower-Division Writing requirement.

Restriction: Upper-division students only.

**PUBHLTH 194B. Clinical and Translational Research Preparatory II. 1-4 Units.**

Provides opportunities for students to participate in clinical and translational research through rotations in at least two health care settings. Builds on preparation through the first course (194A) in the sequence to support exploration of various research topics.

Prerequisite: PUBHLTH 194A. Satisfactory completion of the Lower-Division Writing requirement.

Restriction: Upper-division students only.

**PUBHLTH 194C. Clinical and Translational Research Preparatory III. 4 Units.**

Provides opportunities for students to work closely in a particular clinical and translational research setting. Builds on preparation through the didactic instruction presented in first course of the sequence (194A) to support deeper engagement on a particular research topic.

Prerequisite: PUBHLTH 194B. Satisfactory completion of the Lower-Division Writing requirement.

Repeatability: May be repeated for credit unlimited times.

Restriction: Upper-division students only.

**PUBHLTH 195W. Public Health Practicum and Culminating Experience. 8 Units.**

Provides direct opportunities for Public Health majors to observe and participate in public health activities and/or research; and to cultivate skills for verbal and written communication of contemporary public health topics for an integrative culminating experience.

Prerequisite: PUBHLTH 1 and PUBHLTH 2. Satisfactory completion of the Lower-Division Writing requirement.

Restriction: Upper-division students only. Public Health Sciences Majors only. Public Health Policy Majors only.

**(Ib)**

**PUBHLTH 196A. Clinical and Translational Research Preparatory I - Community-Based Research and Evaluation. 4 Units.**

Provides training for students with an interest in clinical and translational research in a community-based setting. Cultivates skills for study design, research literature review, ethics, responsible conduct of research, and cultural competence while emphasizing professionalism and personal responsibility.

Overlaps with PUBHLTH 194A.

**PUBHLTH 196B. Clinical and Translational Research Preparatory II - Community-Based Research and Evaluation. 4 Units.**

Provides the unique opportunity for students to participate in research in two or more community-based settings. Builds on preparation through PUBHLTH 196A to support exploration of various research topics.

Prerequisite: PUBHLTH 196A

**PUBHLTH 196C. Clinical and Translational Research Preparatory III - Community-Based Research and Evaluation III. 4 Units.**

Final course in the 196 series where students have the unique opportunity to participate in permanent research rotation. Instructs students how to design, perform, interpret, and discuss independent research in a collaborative atmosphere.

Prerequisite: PUBHLTH 196B

**PUBHLTH 197. Field Studies in Public Health. 2-12 Units.**

For students who may either accompany faculty members on field trips or engage in post-practicum work at a field agency.

Prerequisite: PUBHLTH 1 and PUBHLTH 2

Grading Option: Pass/no pass only.

Repeatability: May be taken for credit for 12 units.

**PUBHLTH 198. Directed Studies. 1-4 Units.**

Student participation in a series of research-related activities performed in an individual or small-group setting under the guidance of a faculty advisor.

Prerequisite: PUBHLTH 1

Grading Option: Pass/no pass only.

Repeatability: May be repeated for credit unlimited times.

**PUBHLTH 199. Undergraduate Research. 1-4 Units.**

Original research with Public Health faculty. Attendance at regular research group meetings is also generally expected, and a quarterly written report is required. Strongly recommended for students considering research careers and/or graduate degree programs.

Repeatability: May be repeated for credit unlimited times.

Restriction: Upper-division students only.

**PUBHLTH 200. Foundations of Public Health. 4 Units.**

Presents the overarching framework, principles, and core responsibilities of public health research and practice from a multidisciplinary perspective. Provides necessary foundation for further studies toward advanced cross-cutting approaches essential for public health practice.

Restriction: College of Health Sciences students only. Program in Public Health students only. Master of Public Health Degree students only. Graduate students only. Public Health Majors only.

**PUBHLTH 204. Biostatistics I: Introduction to Statistical Methods. 4 Units.**

Designed to help students develop an appreciation for statistician's view of the research process, emphasizing biomedical research. Instills an understanding of how statistical models are used to yield insights about data that form evidence-based understanding of the world around us.

Same as EPIDEM 204A.

Restriction: Graduate students only.

**PUBHLTH 204B. Biostatistics II: Intermediate Statistical Methods. 4 Units.**

Intended for graduate students in epidemiology, public health, and clinical research fields. Covers common regression-modeling techniques frequently used in biologic and medical applications.

Prerequisite: EPIDEM 204. EPIDEM 204 with a grade of B or better

Repeatability: May be taken for credit 2 times.

Same as EPIDEM 204B.

Restriction: Graduate students only.

**PUBHLTH 204C. Biostatistics III: Advanced Statistical Methods. 4 Units.**

Intended for graduate students in epidemiology, public health, and related fields. Introduces statistical methods for analyzing survival and longitudinal/clustered data, and techniques to resolve missing data.

Prerequisite: EPIDEM 204B. EPIDEM 204B with a grade of B or better

Repeatability: May be taken for credit 2 times.

Same as EPIDEM 204C.

Restriction: Graduate students only.

**PUBHLTH 206A. Principles of Epidemiology. 4 Units.**

Fundamental principles of epidemiology, biostatistics, and epidemiological research. Topics include research methods of measuring health problems in populations, disease control and prevention in populations, how epidemiology contributes to knowledge of disease etiology, and biostatistical analysis and interpretation of epidemiologic data.

Same as EPIDEM 200A.

Restriction: Graduate students only.

**PUBHLTH 206B. Intermediate Epidemiology. 4 Units.**

Learn to design and conduct epidemiologic studies using common designs. Determine why bias and measurement error arise in observational studies, and how they influence effect estimates. Perform and interpret epidemiologic data analyses using statistical software.

Prerequisite: PUBHLTH 206A. PUBHLTH 206A with a grade of B or better

Same as EPIDEM 200B.

Restriction: College of Health Sciences students only. Program in Public Health students only. Master of Public Health Degree students only. Graduate students only. Epidemiology Majors only.

**PUBHLTH 206C. Advanced Epidemiologic Methods. 4 Units.**

Advanced topics in the design and statistical analysis of epidemiologic studies. Topics include simulation methods, counter-matching and multiphase study designs, missing data, and Bayesian analysis. Published simulation studies are discussed and replicated using the R software package.

Prerequisite: EPIDEM 200A and EPIDEM 200B. EPIDEM 200A with a grade of B or better. EPIDEM 200B with a grade of B or better

Same as EPIDEM 200C.

**PUBHLTH 207A. Probability and Statistics in Public Health. 4 Units.**

An introduction to probability and statistical methods, using examples in public health. Topics include descriptive statistics, laws of probability, discrete and continuous probability distributions, estimation, confidence intervals, hypothesis testing, and power calculations for one- and two-sample comparisons.

Prerequisite: PUBHLTH 206A. PUBHLTH 206A with a grade of B or better

Restriction: Program in Public Health students only. Master of Public Health Degree students only. Graduate students only. Public Health Majors only.

**PUBHLTH 207B. Analysis of Public Health Data Using Statistical Software. 4 Units.**

Overview of common statistical methods in public health and how to implement them in R. Topics include linear regression, ANOVA, the Kruskal-Wallis test, logistic regression, missing data and censoring, Kaplan-Meier survival curves, log-rank tests, and Cox regression.

Prerequisite: PUBHLTH 207A. PUBHLTH 207A with a grade of B or better

Restriction: Program in Public Health students only. Master of Public Health Degree students only. Graduate students only. Public Health Majors only.

**PUBHLTH 208. Advances in Social Epidemiology. 4 Units.**

Advances understanding of social distribution and social determinants of disease through multiple risk factor models and mechanisms that emphasize developmental and socio-environmental risk factors on mental and physical health across the life span.

Restriction: Graduate students only.

**PUBHLTH 209. Methods of Demographic Analysis. 4 Units.**

Introduces basic demographic methods used in social science and public health research. Topics include sources and limitations of demographic data; components of population growth; measures of nuptiality, fertility, mortality, and population mobility projection methods; and demographic models.

Same as SOCIOL 226A.

Restriction: Graduate students only.

**PUBHLTH 210. Theory-Driven Secondary Data Analysis. 4 Units.**

Learn how to develop and test theoretically-driven research questions in secondary data sources. Logic of theory building and testing, how to conduct statistical analyses on testable research questions, and interpret results. There is also a lab component.

Restriction: Graduate students only. Environmental Health Sciences Majors only. Epidemiology Majors only. Public Health Majors only.

**PUBHLTH 211A. Latinos/Latinas and Medical Care: Contemporary Issues. 2 Units.**

Introduction to medical anthropological and social science perspectives on Latinos/Latinas in relation to a number of health and medically-related issues, i.e., immigration, gender, reproduction, culture, social structure, political economy, sexuality, utilization of medical services, and health beliefs.

Same as CHC/LAT 211A.

**PUBHLTH 211B. Latinos/Latinas and Medical Care: Contemporary Issues. 2 Units.**

Introduction to medical anthropological and social science perspectives on Latinos/Latinas in relation to a number of health and medically-related issues, i.e., immigration, gender, reproduction, culture, social structure, political economy, sexuality, utilization of medical services, and health beliefs.

Prerequisite: CHC/LAT 211A

Same as CHC/LAT 211B.

**PUBHLTH 213. Epidemiology in Global Health. 4 Units.**

Examines major topics in epidemiology and global health. Research topics within these two disciplines are focused on resource-poor communities, with an application to the global world.

Restriction: Graduate students only. Environmental Health Sciences Majors only. Epidemiology Majors only. Public Health Majors only.

**PUBHLTH 219. Special Topics in Biostatistics, Epidemiology, and Health Informatics. 4 Units.**

Current research in biostatistics, epidemiology, and health informatics. Topics vary from quarter to quarter.

Repeatability: Unlimited as topics vary.

Restriction: Graduate students only.

**PUBHLTH 222. Health Policy and Management. 4 Units.**

Multidisciplinary inquiry into theory and practice concerned with delivery, quantity, costs of health care for individuals and populations. Explores managerial and policy concerns regarding structure, process, outcomes of health services including the costs, financing, organization, outcomes, and accessibility of care.

Same as UPPP 243.

Restriction: Master of Public Health Degree students have first consideration for enrollment. Master of Public Policy Degree students have first consideration for enrollment. Graduate students only. Public Health Majors have first consideration for enrollment. Urban and Regional Planning Majors have first consideration for enrollment.

**PUBHLTH 223. Risk Communication. 4 Units.**

Examines theory and research related to the communication of scientific information in risk communication contexts, risk perceptions, and behavior as related to decision-making under risk.

Restriction: Graduate students only.

**PUBHLTH 239. Special Topics in Health Policy and Management. 4 Units.**

Current research in health policy and management. Topics vary from quarter to quarter.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

**PUBHLTH 242. Theories of Health Communication. 4 Units.**

Explores the concepts, constructs, and theories of communication in health and risk contexts. Examines interpersonal, family, organizational, and mediated communicative processes about health care and conditions from a global perspective.

Restriction: Graduate students only.

**PUBHLTH 244. Health Behavior Theory. 4 Units.**

Introduces the field of Health Behavior and segues into major theoretical perspectives. Focus on health behavior change from the vantage point of individual health behavior and theoretical abstraction. Explores how to relate theory to behavior-change intervention programs.

Restriction: Master of Public Health Degree students only. Graduate students only. Public Health Majors only.

**PUBHLTH 245. Health Promotion Planning. 4 Units.**

Introduces strategic planning integral to intervention planning in public health practice and research, emphasizing the fundamental domains of social and behavioral health science and practices. Students develop an intervention plan for a specific health problem, health behavior, and target population.

Restriction: Graduate students only.

**PUBHLTH 246. Social Research Methods. 4 Units.**

An interactive graduate seminar covering topics related to the research process and study design. Begins with conceptualizing research questions, hypotheses, and then turns to topics in measurement and concludes with experimental, quasi-experimental, and observational study designs.

Restriction: Graduate students only.

**PUBHLTH 247. Program Evaluation. 4 Units.**

Introduces methods, tools, and procedures for systematic investigation of the effectiveness of programs in health and social services for disease intervention, prevention, and health promotion. Includes development of program evaluation plans, logic models, contextual frameworks, study designs, and data analyses.

Restriction: Graduate students only.

**PUBHLTH 248. Fundamentals of Maternal and Child Health - Programs, Problems, and Policy. 4 Units.**

Overview of issues facing women, children, and families from a public health perspective. Discusses role of socio-economic, political, biological, environmental factors on population health. Studies historical foundations and current factors impacting Maternal Child Health programs and legislation in the US.

Restriction: Graduate students only.

**PUBHLTH 250. Health Status and Care Disparities. 4 Units.**

Expert health care providers present viewpoints and interdisciplinary strategies for addressing sociocultural, economic, gender, age, and other disparities in population health status and care provision.

Restriction: Graduate students only.

**PUBHLTH 251. Models of Practice and Intervention at the Community Level. 4 Units.**

Examines and critiques current models, frameworks, theories for.

Prerequisite: CHC/LAT 200A or PUBHLTH 246

Same as CHC/LAT 251.

Restriction: Graduate students only.

**PUBHLTH 259. Special Topics in Social and Behavioral Health Sciences. 4 Units.**

Current research in Social and Behavioral Health Sciences. Topics vary from quarter to quarter.

Repeatability: Unlimited as topics vary.

Restriction: Graduate students only.

**PUBHLTH 264. Introduction to Environmental Health Science. 4 Units.**

Convergence of agents (chemical, physical, biological, or psychosocial) in environment can emerge as diseases influenced by social, political, and economic factors, allowing them to become rooted in society. How these agents from various spheres come together and impact human health.

Same as EPIDEM 264, EHS 264.

Restriction: Graduate students only. Environmental Health Sciences Majors only. Epidemiology Majors only. Public Health Majors only. Environ Health Sci and Policy Majors only.

**PUBHLTH 269. Air Pollution, Climate, and Health. 4 Units.**

Emission of air pollutants into the atmosphere, physical and meteorological processes that affect transport, and influence on global warming. Concepts of how and where people are most exposed, and how exposures and health effects differ in developed and developing regions.

Same as EPIDEM 269, EHS 269.

**PUBHLTH 272. Occupational Health Psychology. 4 Units.**

Introduction to psychological and social factors in the workplace that affect health and productivity. Goal is to support redesign of the workplace and social situations that can reduce stress-related illness risks, and increase humane forms of productivity and competence development.

Same as EHS 294.

Restriction: Graduate students only.

**PUBHLTH 275. Environmental Modeling and Risk Management. 4 Units.**

Surveys the general principles, basic mathematical methods, and practices of environmental modeling and human health risk assessment. Topics include advection-dispersion models, risk management, and risk perception. Students conduct an original risk assessment as a final group project.

Prerequisite: MATH 2A and STATS 7

Same as EHS 275.

Restriction: Graduate students only.

Concurrent with PUBHLTH 175.

**PUBHLTH 277A. Target Organ Toxicology I. 4 Units.**

Mechanistic analysis of responses occurring in various organ systems of experimental animals and humans exposed to environmental and occupational chemicals and radiation. Review distinctive cellular and tissue structure and physiological function of the various organ systems.

Same as EHS 206A.

Restriction: Graduate students only.

**PUBHLTH 277B. Target Organ Toxicology II . 4 Units.**

Mechanistic analysis of responses occurring in various organ systems of experimental animals and humans exposed to environmental and occupational chemicals and radiation. Review of distinctive cellular and tissue structure and physiological function of the various organ systems.

Prerequisite: PUBHLTH 277A or EHS 206A

Same as EHS 206B.

Restriction: Graduate students only.

**PUBHLTH 278. Industrial Toxicology. 4 Units.**

Analysis of responsibilities toxicologists have in industry, including product safety, generating material safety, data sheets, animal testing, ecotoxicological testing, risk/hazard communication, and assisting industrial hygienists and occupational physicians; emphasis on interdisciplinary nature of industrial toxicology and communication skills.

Prerequisite: PUBHLTH 277B or EHS 206B

Same as EHS 220.

**PUBHLTH 279. Special Topics in Environmental & Occupational Health. 4 Units.**

Current research in environmental and occupational health. Topics vary from quarter to quarter.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

**PUBHLTH 280. Global Burden of Disease. 4 Units.**

Introduces composite measures of disease burden, including Disability Adjusted Life Years and their use in prioritizing disease burden at local, regional, and global levels. Focuses on WHO's landmark assessments and introduces DISMOD software for specific analyses.

Restriction: Graduate students only.

**PUBHLTH 281. Infectious Disease Epidemiology. 4 Units.**

Geographical distribution of infectious diseases and the health and disease risk in diverse human populations. Introduces basic methods for infectious disease epidemiology and case studies of important diseases. Includes surveillance, outbreak investigation, emerging pathogens, traditional and molecular epidemiology.

Restriction: Graduate students only.

**PUBHLTH 282. Climate Change and Global Health. 4 Units.**

Designed for students to examine major topics in climate change and global health. Draws heavily on the literature in order to develop an understanding of micro- and macro-level impacts and drivers with regard to climate change and health.

Restriction: Graduate students only. Environmental Health Sciences Majors only. Epidemiology Majors only. Public Health Majors only.

**PUBHLTH 283. Geographic Information Systems for Public Health. 4 Units.**

Provides a broad introduction to the use of Geographic Information Systems software to carry out projects for visualizing and analyzing spatial data to address significant issues of health care and policy-planning.

Prerequisite: PUBH 206

Restriction: Graduate students only.

Concurrent with PUBHLTH 190.

**PUBHLTH 286. Advanced Geographic Information Systems and Spatial Epidemiology. 4 Units.**

Students expand their current knowledge of the ArcGIS software to develop advanced geographic-related research questions, learn how to apply spatial epidemiologic methods to public health data, and integrate their skills in a GIS project of their design.

Prerequisite: PUBHLTH 283

Restriction: Graduate students only.

**PUBHLTH 287. Qualitative Research Methods in Public Health. 4 Units.**

General introduction to qualitative research methods for investigating public health questions at various scales from community level to global populations. Emphasizes systematic approaches to the collection, analysis, interpretation of qualitative data.

Restriction: Graduate students only.

**PUBHLTH 288. Research Proposal Writing in Global Health. 4 Units.**

Overview of financial support for research in global health and disease prevention. Collaborative agreements, guidelines for proposal writing, team building, budgeting, peer-review process, and transitioning from proposal to research project implementation.

Restriction: Graduate students only.

**PUBHLTH 289. Special Topics in Global Health and Disease Prevention. 4 Units.**

Current research in global health and disease prevention. Topics vary from quarter to quarter.

Repeatability: Unlimited as topics vary.

Restriction: Graduate students only.

**PUBHLTH 290. Special Topics in Public Health. 4 Units.**

Studies in selected areas of public health. Topics addressed vary each quarter.

Repeatability: Unlimited as topics vary.

Restriction: Graduate students only.

**PUBHLTH 291A. Seminar: Advances and Challenges in Public Health. 2 Units.**

Forum for exploring recent advances and challenges in all disciplines of public health research and practice. Features case studies exemplifying the integration of core competencies with cross-cutting interdisciplinary themes of public health.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

Concurrent with PUBHLTH 191A.

**PUBHLTH 291B. Seminar: Advances and Challenges in Public Health. 2 Units.**

Forum for exploring recent advances and challenges in all disciplines of public health research and practice. Features case studies exemplifying the integration of core competencies with cross-cutting interdisciplinary themes of public health.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

Concurrent with PUBHLTH 191B.

**PUBHLTH 291C. Seminar: Advances and Challenges in Public Health. 2 Units.**

Forum for exploring recent advances and challenges in all disciplines of public health research and practice. Features case studies exemplifying the integration of core competencies with cross-cutting interdisciplinary themes of public health.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

Concurrent with PUBHLTH 191C.

**PUBHLTH 292. Ethics and Responsible Conduct of Research in Public Health. 4 Units.**

Issues of scientific integrity and satisfies the requirements for training in public health ethics. Includes guidelines for responsible conduct of research, federal and international codes, administrative review and approval, conflict of interest, and privacy and safety of research participants.

Restriction: Graduate students only.

Concurrent with PUBHLTH 193.

**PUBHLTH 293. Foundations of Clinical and Translational Science. 4 Units.**

Introduces rationale and imperative for clinical translational science and various approaches being developed to speed-up discoveries and their transformation into health care practices. Compares and contrasts current impediments to clinical research with the potential and transformative power of translational science.

Restriction: Graduate students only.

**PUBHLTH 294. Research Communication in Public Health. 4 Units.**

Strategies for effective writing and oral presentation of research characteristics and results to various audiences. Includes exercises in writing for the public, for scholarly journals, and at conferences.

Restriction: Graduate students only.

**PUBHLTH 295. Graduate Practicum and Culminating Experience in Public Health. 8 Units.**

Provides opportunities for hands-on experience for graduate students at agencies or organizations engaged in public health practice. Students are matched with placement sites based on academic preparation and students' career goals. The practicum report is integrated into the culminating experience.

Prerequisite: PUBHLTH 200 and PUBHLTH 244 and PUBHLTH 222 and PUBHLTH 264 and PUBHLTH 207A. PUBHLTH 200 with a grade of B or better. PUBHLTH 244 with a grade of B or better. PUBHLTH 222 with a grade of B or better. PUBHLTH 264 with a grade of B or better. PUBHLTH 207A with a grade of B or better

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only. Public Health Majors only.

**PUBHLTH 296. Doctoral Dissertation Research and Writing. 1-12 Units.**

Dissertation research with Public Health faculty.

Prerequisite: Advancement to candidacy.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be taken for credit for 12 units.

Restriction: Graduate students only. Public Health Majors only.

**PUBHLTH 297. Research Design and Proposal Writing. 4 Units.**

Evaluate strengths of research findings based on methods used by researchers to develop research proposals. Components such as collaborative agreements, guidelines for proposal writing, budgeting, peer-review process, and transitioning from proposal to research project implementation are addressed.

Restriction: College of Health Sciences students only. Program in Public Health students only. Master of Public Health Degree students only. Graduate students only. Public Health Majors only.

**PUBHLTH 298. Directed Studies in Public Health. 2-8 Units.**

Directed study with Public Health faculty.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

**PUBHLTH 299. Independent Study in Public Health . 2-8 Units.**

Independent research with Public Health faculty.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

**PUBHLTH 399. University Teaching. 2-4 Units.**

Limited to teaching assistants.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be repeated for credit unlimited times.