Population Health (POPH)

Courses

POPH 001 Introduction to Population Health 4 Credits
Despite significant advances in medicine and public health, inequities in health persist. Understanding health on a population level is an approach that seeks to improve the health of the whole population, unravel variations in health outcomes, and to identify effective strategies for reducing or eliminating inequities. The purpose of this course is to provide students with an understanding of: 1) how population health defined and measured; and 2) the determinants of population health (from cell to society).

POPH 002 Population Health Research Methods & Application 4 Credits
This course provides students with fundamental principles of research methods relevant to population health and the translation of research into practice. Through this course, we will review a range of study designs, including experimental and observational studies, mixed methods, and comparative qualitative case study methods. In addition, students will obtain the skills needed to translate research into practice for multiple stakeholder groups.

Prerequisites: POPH 001

Repeat Status: Course may be repeated.

POPH 010 Seminar: Population Health 1 Credit
This one-credit special topics seminar will focus on the development of Population Health relevant skills in the areas of communication, professional development, mentorship and leadership, proposal development, policy and advocacy and community engagement and coalitions.

Repeat Status: Course may be repeated.

POPH 012 Seminar: Ethics in Population Health 1 Credit
This course will introduce students to ethical concepts and critical issues pertaining to the ethical inclusion of human subjects in population health research. This course will provide opportunities for writing about, discussion of, and case-based learning around current and historical perspectives on population health research. During this course, students will complete the necessary training for conducting human subjects research at Lehigh University.

POPH 101 History of Population Health 3 Credits
This course introduces students to the development of population health as a convergent science. Students will learn about the evolution of population health interests, normative beliefs in service delivery, and policy at the international and domestic level. The principles, ethical values and services enforced by law will be learned. Students will explore the initiatives, collectively achieved among various sectors, addressing the determinants of health. We conclude by addressing future population health challenges, such as the environment, non-communicable diseases, and inequalities.

POPH 103 Biological Basis of Population Health 4 Credits
How do social, economic, environmental determinants bring about diseases in groups of human beings? This course will survey the methods of investigating the biological mechanisms underlying human health outcomes. Students will explore investigation of human diseases using emerging and traditional tools in genomics, molecular, immunological, and environmental fields. Students will also be expected to deepen their awareness of individual/group susceptibility, and propose societal approaches to intervention and prevention of human diseases.

POPH 105 Introduction to Maternal and Child Population Health 4 Credits
The course introduces the student to the Maternal and Child Health field. Students will examine the multi-dimensional determinants of maternal and child health issues using a Life Course approach. Students will also explore the roles of research, programs, policy, and advocacy in the reduction of maternal and child health disparities.

POPH 106 Global Environment and Human Welfare 3 Credits
This course investigates the present understanding of multiple pollution agents and their effects on human health and well-being. The students will examine the history, the emergence, the known risks from exposure to specific pollutants through multiple media (e.g., air, water, food) with a particular focus on air pollution. Through readings, discussions, and a project, students are expected to cultivate a critical understanding of the risks posed by environmental pollutants on human health and identify knowledge gaps.

POPH 120 Independent Study or Research in Population Health 1-4 Credits
This course can be directed readings or research in Population Health or an experiential learning experience that puts students' understanding of Population Health into practice. Department permission required.

Repeat Status: Course may be repeated.

POPH 130 Internship in Population Health 1-4 Credits
In this introductory course, students will engage in supervised work in Population Health. Placements will be arranged to suit individual interests and career goals. Potential internship sites include government agencies, non profit organizations and the private sector. A written report is required and preceptor evaluation will be required. Department permission required.

Repeat Status: Course may be repeated.

POPH 150 Special Topics in Population Health 3,4 Credits
In this course, students will engage in an intensive exploration of a topic of special interest that is not covered in other courses. Topics addressed will be at an intermediate level.

Repeat Status: Course may be repeated.

POPH 301 Population Health Capstone (Proposal) 4 Credits
In this writing intensive course, students will work closely with their academic advisor and site preceptor to develop a detailed proposal for a Population Health project. Department permission required.

POPH 302 Population Health Capstone (Execution) 4 Credits
In this course, students will implement and evaluate the Population Health project proposed in POPH 301. A final capstone report, oral presentation, and preceptor evaluation will be required. Department permission required.

Prerequisites: POPH 301

POPH 304 Seminar: Writing about Science 1 Credit
This one-credit special topics seminar will expose students to the planning, writing, editing and publishing stages of writing about science in various mediums, including journal articles, policy briefs, and mass media.

Repeat Status: Course may be repeated.

POPH 320 Independent Study or Research in Population Health 1-4 Credits
This course can be directed readings or research in Population Health or experiential learning that puts the student's understanding of Population Health into practice. Department permission required.

Repeat Status: Course may be repeated.

POPH 330 Internship in Population Health 1-4 Credits
In this advanced course, students will engage in supervised work in Population Health. Placements will be arranged to suit individual interests and career goals. Potential internship sites include government agencies, non profit organizations, and the private sector. A written report is required and preceptor evaluation will be required. Department permission required.

Repeat Status: Course may be repeated.

POPH 350 Special Topics in Population Health 3,4 Credits
In this course, students will engage in an intensive exploration of a topic of special interest that is not covered in other courses. Topics addressed will be at an advanced level.

Repeat Status: Course may be repeated.
POPH 401 Population Health Concepts and Methods 3 Credits
POPH 403 Biological Basis of Population Health: Concepts and Methods 3 Credits
POPH 405 (EDUC 405) Qualitative Research Methods 3 Credits
POPH 406 Seminar: Cultural Understanding and Health 1 Credit
POPH 407 Seminar: Data-informed Policy Making 1 Credit
POPH 408 Population Health Survey Methods 3 Credits
Prerequisites: POPH 401 and (EPI 404 or EPI 304) and BSTA 402
POPH 409 Social Determinants of Population Health 3 Credits
Prerequisites: POPH 401
POPH 410 Population Health Thesis I (proposal) 1 Credit
Prerequisites: POPH 401
POPH 411 Population Health Thesis II (execution) 3 Credits
Prerequisites: POPH 410
POPH 412 Seminar: Research Ethics in Population Health 1 Credit
POPH 431 Environmental Health Sciences: Concepts and Methods 3 Credits