PUBLIC HEALTH
https://www.uvm.edu/publichealth/

OVERVIEW
The University of Vermont Program in Public Health is an innovative, online, interdisciplinary, accredited Public Health Program offering the Master of Public Health (M.P.H.) degree and Certificates of Graduate Study. The program is designed as a collaboration of disciplines, through its faculty and community of students, that is both academic and applicable to health needs of actual populations, in both health care and community settings. Graduates will experience a comprehensive foundation of population health sciences to prepare them as they enter health care fields, public health practice, or further advanced study in public health and related sciences.

The UVM public health program offers a generalist M.P.H. degree or an M.P.H. with a concentration in Global Health Leadership. All graduates, regardless of concentration, will complete sufficient course work to attain depth and breadth in the 6 core areas of public health knowledge (Public Health and Health Policy, Biostatistics, Epidemiology, Environmental Health Sciences, Health Policy and Management, and Social and Behavioral Sciences), as well as interdisciplinary/cross-cutting areas. All graduate professional public health degree students will develop skills in basic public health concepts and demonstrate the skills and integration of knowledge, and application of these concepts through a culminating project experience.

The University of Vermont Public Health Program offers 4 online Certificates of Graduate Study (CGS): Public Health, Global and Environmental Health, Epidemiology, and Health Care Management and Policy, and 8 Micro-Certificates of Graduate Study (mCGS): Public Health, Public Health Informatics, Climate Change and Human Health, Epidemiology, Global Health, Health Care Management and Policy, Health Equity, and Health Policy and Law. Each CGS is a concise, 6-course curriculum that introduces students to the program area and each mCGS is a focused 3-course curriculum. Completing any CGS or mCGS will provide students with competency in core areas of public health as well as 9 to 18 applicable credits for which the grade received was a B or higher should they decide to pursue the M.P.H. degree at UVM.

After successful completion students will be prepared to:

1. Practice in a changing health care environment that requires accountability for the health of entire populations and skills to prevent illness and promote health.
2. Engage in public health practice, with knowledge and skills needed for effective participation in work of government public health agencies or non-profit health-related organizations.
3. Apply knowledge and skills from a strong foundation of population health sciences in preparation for further graduate study at the doctoral level in public health and related fields.

DEGREES
Public Health AMP
Public Health CGS
Public Health mCGS
Public Health M.P.H.
Public Health Informatics mCGS
Climate Change and Human Health mCGS
Epidemiology CGS
Epidemiology mCGS
Global and Environmental Health CGS
Global Health mCGS
Health Care Management and Policy CGS
Health Care Management and Policy mCGS
Health Equity mCGS
Health Policy and Law mCGS

FACULTY
Carney, Jan Kirk; Professor, Department of Medicine-Pulmonary; MD, University of Cincinnati; MPH, Harvard University
de Jager, Elzerie; Assistant Professor, Department of Medicine; MD, PHD, James Cook University, Australia
Delaney, Thomas; Associate Professor, Department of Pediatrics; PHD, University of Denver
Khan, Shamima: Assistant Professor, Department of Medicine; PHD, University of Louisiana

Courses
PH 5000. Controversies in Public Health. 3 Credits.
Public health and health policy issues provoke controversy. Compelling scientific evidence suggests strategies to prevent disease and illness, but progress is driven by scientific advances and societal norms. Highlights current health issues through the lens of controversies to determine what impedes our collective progress towards a healthier society for individuals and communities. Prerequisite: Junior, Senior, or Graduate student; Honors College Sophomores by Instructor permission.
PH 5001. Epidemiology for Practice. 3 Credits.
Epidemiology is the basic science of understanding disease at the population level. Provides coverage of epidemiologic principles and techniques without detailed mathematical analyses. Emphasis will be on the application of epidemiologic principles to public health and health care issues and settings, through the use of readings, online resources, case studies, and class discussion. Prerequisite: Junior, Senior, or Graduate student; Honors College Sophomores by Instructor permission.

PH 5002. Public Health Advocacy. 3 Credits.
Explores how students can use their voices and position within public health to promote health and dismantle disparities. Identifies how to use public health advocacy in the different disciplines within public health and evaluate the importance of stakeholders, education, awareness, and community connectedness. Utilizes discussion-based practices to explore a myriad of existing public health campaigns and enhance communication skills and practices when advocating for positive health outcomes. Prerequisites: Junior, Senior, or Graduate student; Honors College Sophomores with Instructor permission.

PH 6000. Health Equity. 3 Credits.
Covers health equity frameworks, theories, and research approaches. Explores cultural competence, healthcare access, and health equity measurement, and then examines different population perspectives on health equity. Develops skills necessary to understand health equity concepts, critique literature, and ultimately to work towards achieving health equity.

PH 6010. Public Health & Health Policy. 3 Credits.
Course focuses on current public health issues, barriers to improving population health, and policy tensions between science, economics, education, politics, government, media, and public health.

PH 6011. Cancer Epidemiology. 3 Credits.
Prepares students to design and implement studies of cancer epidemiology in the U.S. and globally. After gaining an understanding of the statistics used to measure cancer incidence and prevalence, students will explore risk factors for various cancers in order to learn relevant factors for oncogenesis, focusing on vulnerable populations.

PH 6020. Epidemiology I. 3 Credits.
Epidemiology is the study of disease distribution and determinants in populations; we will define populations and estimate the distribution of health-related conditions and their determinants. Pre/co-requisites: College-level Mathematics course; Bachelor’s degree.

PH 6030. Biostatistics I:App Rsch in PH. 3 Credits.
Biostatistics I (Applied Research Methods in Public Health) includes biostatistics, research designs, and qualitative approaches, and includes emphasis on evaluating research articles in public health. Pre/co-requisites: College-level Mathematics course; Bachelor’s degree.

PH 6040. Environmental Public Health. 3 Credits.
Explores major areas of environmental public health (EPH), including environmental hazards, exposures, and related health outcomes, including emerging topics in environmental public health.

PH 6060. Social&Behavioral Public Hlth. 3 Credits.
This course addresses the behavioral, social and cultural factors related to individual and population health, and health disparities over the life course.

PH 6070. Epidemiology 2. 3 Credits.
Exposure to advanced epidemiological concepts, such as effect modifications and modeling using multiple variables, related to establishing causal relationships from observational data. Prerequisites: PH 6020, PH 6030.

PH 6080. Environmental Public Health 2. 3 Credits.
Students explore public health within the context of natural and human-made environments, and examine methods of practice and emerging environmental health topics. Prerequisite: PH 6040.

PH 6090. Public Health Biostatistics II. 3 Credits.
An advanced applied research methods course with the goal of helping students understand and apply multivariate regression analyses, non-parametric methods, survival analysis and advanced concepts with confounding and effect modification, and interpreting data in public health applications. Prerequisite: PH 6030.

PH 6100. Public Health Law and Ethics. 3 Credits.
Public health law examines the government’s authority, at various jurisdictional levels, to improve the health of the general population within societal limits and norms. Prerequisite: Bachelor’s degree.

PH 6110. Global Public Health. 3 Credits.
This course explores global public health challenges affecting people primarily in developing or resource- constrained countries. Cultural competency concepts will be embedded. Prerequisite: Bachelor’s degree.

PH 6120. Food Systems & Public Hlth. 3 Credits.
This course explores food systems’ influence on public health, and how technology, policy, biology, epidemiology, and historical knowledge can support a healthier food system. Prerequisite: Bachelor's degree.

PH 6140. Environmental Risk & Risk Comm. 3 Credits.
This course explores theory, policy and techniques for environmental risk communication from the viewpoints of government, industry, special interest groups, and the general public.

PH 6150. Public Health Surveillance. 3 Credits.
Explores surveillance of infectious and non-infectious diseases, health behaviors and population characteristics, fundamental to nearly all fields of modern public health practice. Prerequisite: PH 6020.

PH 6160. Social Determinants of Health. 3 Credits.
Uses an epidemiological lens to examine the major social variables that affect the health of a population. Close analysis of how our social structures impact health disparities, examines theories and empirical data to examine how gaps in our social structures lead to health disparities and inequalities.
PH 6170. Mgmt in Hlth Services & Med Care. 3 Credits.
Addresses major issues and challenges faced by health services managers relating to established and evolving social, economic, and professional policies in a context of practical problem assessment and appropriate resolution.

PH 6180. Improving Health in Population. 3 Credits.
Descriptive and chronic disease epidemiology, health determinants, and community resources will be utilized to develop strategies and interprofessional skills to improve individual and population health. Exploration of roles of health professionals in the care of populations with an emphasis on the US health care system.

PH 6200. Public Health Communications. 3 Credits.
An introduction to the field of Public Health Communications, focusing on three areas: Crisis and Emergency Risk Communications, Data Communications/visualization, and Social Marketing (or Behavior Change Communications). While each area relies on a theoretical foundation, the focus is professional application of the communication techniques.

PH 6201. One Health: Theory to Practice. 3 Credits.
Explores the One Health concept and approach. Covers the One Health Triad, the One Health practitioner, One Health competencies, One Health education and communication, and non-scientific disciplines involved in One Health decision-making and problem-solving. Enables the development of hard, One Health skills that can be integrated into daily public health practice. Readings create the course framework; primary sources will be provided to complement the material.

PH 6210. Controversies in Hlth Economics. 3 Credits.
Covers health economic concepts, principles and theories, as well as the application of these methods to a range of practical scenarios. Examines the advantages and disadvantages of various health economic techniques and health economic evaluation.

PH 6211. Global Health Leadership. 3 Credits.
Prepares students for leadership roles in global public health organizations. After identifying governance and financing structures, students apply management and leadership principles through case studies, emphasizing application of relevant analytical skills. Topics include leadership principles, human resources management, global health ethics, social marketing, global health financing, and future trends in global health.

PH 6220. One Health: Zoonoses. 3 Credits.
Zoonoses and vector-born disease account for the majority of emerging and re-emerging diseases. Covers the drivers that influence infection in animals and humans, tools used for disease monitoring and prevention, and policies and programs aimed at prevention. Cross-listed with: ABIO 6090.

PH 6240. Public Health Informatics. 3 Credits.
Public health practice relies on timely, thorough and reliable information from a variety of sources. Informatics is an emerging field that employs information technology tools and methods to address public health challenges and to improve public health outcomes.

PH 6250. Investigating Disease Outbreaks. 3 Credits.
Investigating disease outbreaks is a fundamental responsibility of public health. This course covers field epidemiology outbreak investigation methods, working on an investigatory team, interacting with relevant agencies, and the selection and implementation of appropriate interventions.

PH 6260. Legal Issues in Health Care. 3 Credits.
Provides an overview of the legal environment related to healthcare. Using court decisions and other law, explores medical malpractice, negligence, liability, patient rights, healthcare reform and compliance with such laws as Medicaid, Medicare, and HIPAA.

PH 6270. Climate Change & Human Health. 3 Credits.
Global climate change is increasing extreme weather events, influencing air and water quality, and shifting vector habitats. Students will explore basic climate science, health, consequences of climate change, and public health approaches to assessment, communication, projection, mitigation, and adaptation.

PH 6280. Health in Humanitarian Crises. 3 Credits.
Offers an in-depth view of the complexities of responding to natural and conflict related disasters. Introduces a range of topics that lay the framework for humanitarian response and will generate further learning.

PH 6300. Exploring Healthcare Systems. 3 Credits.
Explore a healthcare system outside the USA. Common elements in all healthcare systems are required for effective and efficient delivery. Field visits, presentations, and cultural exposure are included in the program. Prerequisite: Instructor permission.

PH 6310. Climate Change Emergencies. 3 Credits.
Floods, droughts, severe heatwaves, wildfires, and disruptions to the food supply are a few anticipated direct effects of climate change. Examines each of these public health challenges, and their potential to cause/significantly contribute to complex humanitarian emergencies, civil unrest, military conflict, and large-scale migration, as well as policy implications going forward.

PH 6320. Maternal and Child Health. 3 Credits.
Introduces major national programs and policies that directly affect women and children in the US and utilize program case studies from around the world. Provides an understanding of social determinants of health and the life course approach to analyze these programs and policies.

PH 6330. Global Mental Health. 3 Credits.
Provides a firm grounding in what is known about mental health issues affecting global populations. Examines a wide range of issues, ranging from how mental illness is identified to innovative treatment approaches and how cultural considerations influence mental health promotion efforts.

PH 6920. Culminating Project Experience. 1-6 Credits.
Prepares students to apply knowledge and skills in a culminating project experience that reflects research and practice needs of actual populations. Prerequisites: PH 6010, PH 6020, PH 6030, PH 6070.
**PH 6990. Special Topics. 1-18 Credits.**
See Schedule of Courses for specific titles.

**PH 6993. Independent Study. 1-18 Credits.**
A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

**PH 6995. Graduate Independent Research. 1-18 Credits.**
Graduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.