

# PUBLIC HEALTH (PUBH)

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## **PUBH 510 - Intro to Epidemiology. 3 Credits.**

Offered spring. Open to PUBH majors only. Principles and methods of epidemiologic investigation, descriptive and analytic epidemiology techniques, disease frequency, risk determination, study designs, causality, and validity. Level: Graduate

## **PUBH 511 - History & Theory Epidemiology. 3 Credits.**

Offered autumn. Open to PUBH majors only. This graduate course covers the basic science of public health. Major schools of epidemiology from the Greek, Italian and English traditions will be compared and contrasted. Basic concepts and terminology will be introduced and major pandemics used to illustrate the evolution of the field. Level: Graduate

## **PUBH 515 - Public Health Genetics. 3 Credits.**

Offered autumn. Open to PUBH majors only. Basic principles of genetics and genomics, application to public health practices and research. Includes issues in public health genetics such as informed consent, screening for genetic susceptibility, and ethical, legal and social implications. Level: Graduate

## **PUBH 520 - Fundamentals of Biostatistics. 3 Credits.**

Offered autumn. Open to PUBH majors only. This course is designed for graduate students and practitioners in public health, biomedical sciences, and related fields. The course introduces basic vocabulary, concepts, and methods of biostatistics. The goal is to provide an introduction to how biostatistics works. Topics will include descriptive statistics, probability, random variables, probability distributions, statistical inference, chi-square analysis, linear regression, and correlation. Level: Graduate

## **PUBH 525 - Multi/Native American Pub Hlth. 3 Credits.**

Offered Autumn. Open to PUBH majors only. This course is designed to provide general overview of multicultural issues within the United States and specifically within Montana. The course will provide overview information about health disparities within the nation and how these disparities disproportionately impact ethnic minority populations. Montana's largest minority population is native American tribal communities. As a result, much of the course will incorporate advanced knowledge and topics relating to regional health disparities facing Native American communities. Level: Graduate

## **PUBH 530 - Pub Hlth Admin and Mangmnt. 3 Credits.**

Offered autumn. Open to PUBH majors only. Overview of public health and health care systems; organizational structures, functions, authorities, policies and procedures; programmatic budgeting, operations, and prioritizations; program performance reporting and improvement; grants and contracts; informatics; human relations and negotiation; management and leadership; and business planning. Level: Graduate

## **PUBH 531 - Leadership in Public Health. 3 Credits.**

Offered spring. Open to PUBH majors only. Prereq., PUBH 530 or consent of instr. This course deepens the student's knowledge and understanding of the role of public health leaders in the community whether in forming partnerships between public health agencies or with private entities. This course begins by building an understanding of the principles of leadership, explores the applications of leadership to public health, develops the relationship between leadership skills and competencies, studies the role of leadership in evaluation and research and concludes with a look at public health now versus how it could be in the future. Level: Graduate

## **PUBH 535 - Health Policy. 3 Credits.**

Offered autumn and spring. Open to PUBH majors only. The evolution and intersection of international, federal, state, and local public health policy. Level: Graduate

## **PUBH 540 - Social & Behav Sci in Pub Hlth. 3 Credits.**

Offered autumn. Open to PUBH majors only. Behavioral and social factors relevant to the identification and solution of public health problems, principles of health behavior change, applications, and assessment of interventions. Level: Graduate

## **PUBH 548 - Issues in Mental & Child Health. 3 Credits.**

Offered Summer. Prereq., Public Health majors. This course provides an overview of maternal and child health problems, programs, and policies. Using the life-course perspective, this course examines the social determinants of health and development of women, infants, children and adolescents. Students will become familiar with the epidemiology of maternal and childhood diseases and assess the resources and interventions used to combat them. Level: Graduate

## **PUBH 550 - Progrm Eval & Res Meth. 3 Credits.**

Offered every odd summer. Open to PUBH majors only. Prereq., PUBH 510 or equiv. and consent of instr. Covers purpose statements, standards, study designs, sampling, measurement, methods for data collection and analysis, interpretation, and report preparation. Models of evaluation described, and similarities and differences between research and evaluation methods explored. Level: Graduate

## **PUBH 560 - Environmental & Rural Health. 3 Credits.**

Offered spring. Open to PUBH majors only. Relationship of people to their physical environment, how this relationship impacts health, and efforts to minimize negative health effects. Level: Graduate

## **PUBH 570 - Ethical Issues in Public Hlth. 3 Credits.**

Offered summer. Open to PUBH majors only. Focus on the values and moral issues that underlie U.S. public health policies. Course examines ethical decision making in areas such as policy development, research, environmental health, occupational health, resource allocation, and genetics. Level: Graduate

## **PUBH 580 - Rural Health Iss Global Contxt. 3 Credits.**

Offered summer. Open to PUBH majors only. Focus on rural concerns and global influences on public health. Covers trends in global health, global health policies, players, priorities, human rights, health equity, and mobile and vulnerable populations. Students will be introduced to health research methods and design, which will be used to analyze rural and global health issues. Emphasize the science and art of epidemiological strategies to answer specific health questions. Level: Graduate

## **PUBH 590 - Research. 3 Credits.**

(R-6) Offered autumn and spring. Open to PUBH majors only. Prereq., admission to the M.P.H. program and consent of instructor. With the guidance of their faculty advisor, students will develop a written proposal specific to the goals of their research project, and carry out the project. Level: Graduate

## **PUBH 591 - Special Topics/Experimental. 3 Credits.**

(R-12) Offered intermittently. Open to PUBH majors only. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Previous topics have included Global Health and Epidemiology of Infectious Disease. Level: Graduate

## **PUBH 592 - Independent Study. 1-6 Credits.**

(R-6) Offered autumn and spring. Open to PUBH majors only. Prereq., admission to the M.P.H., program and consent of instructor. Supervised readings, research, or public health practice. Level: Graduate

**PUBH 594 - Professional Paper. 3 Credits.**

Offered autumn and spring. Open to PUBH majors only. Prereq., consent of instructor. Students will write and submit an original research paper to a peer-reviewed public health or medical journal. Students may also fulfill the professional paper requirement by presenting a conference paper or conference poster to a local, regional, or national meeting. Offered credit/no credit only. Level: Graduate

**PUBH 595 - Practicum. 1-12 Credits.**

(R-12) Offered autumn and spring. Open to PUBH majors only. Prereq., consent of instructor. Semester long, supervised graduate practicum in a health science setting, followed by an oral defense. Offered credit/no credit only. Level: Graduate

**PUBH 599 - Professional Portfolio. 3 Credits.**

Offered autumn and spring. Open to PUBH majors only. Prereq., consent of instructor. Students will write and submit an original research paper to a peer-reviewed public health or medical journal. Students may also fulfill the professional paper requirement by presenting a conference paper or conference poster to a local, regional, or national meeting. Offered credit/no credit only. Level: Graduate

**PUBH 690 - Research. 1-6 Credits.**

(R-6) With the guidance of their faculty advisor, students will develop a written proposal specific to the goals of their research project, and carry out the project.

**PUBH 691 - Special Topics. 1-6 Credits.**

Students will learn about special considerations researchers incorporate into studying neurological diseases. Course materials will include a presentation of the pathophysiology, clinical aspects and descriptive epidemiology of a variety of neurologic diseases. Particular emphasis will be placed on the methodologic challenges and strategies associated with the study of these diseases.

**PUBH 692 - Independent Study. 1-6 Credits.**

Supervised readings, research, or public health practice.

**PUBH 694 - Seminar. 1-6 Credits.**

Students discuss experiences with goal of integrating theory and practice.