# **PUBLIC HEALTH**

Not all courses are offered every semester. Refer to the schedule of courses for each term's specific offerings. More Info (https://one.uf.edu/soc/)

Unless otherwise indicated in the course description, all courses at the University of Florida are taught in English, with the exception of specific foreign language courses.

# **Department Information**

Website (https://publichealth.phhp.ufl.edu/)

# CONTACT

1225 Center Drive HPNP BUILDING GAINESVILLE FL 32610 Map (http://campusmap.ufl.edu/#/index/0749)

# Curriculum

· Artificial Intelligence in Public Health and Healthcare Certificate

- Public Health
- Public Health Minor

# Courses

# HSC 4913 Supervised Research Experience 0-4 Credits

## Grading Scheme: Letter Grade

An opportunity to explore an area of interest in health research or the delivery and/or administration of health services through a firsthand and supervised research experience.

Prerequisite: Instructor permission.

# PHC 3440 Global Public Health 3 Credits

# Grading Scheme: Letter Grade

Examines global health threats, health production, and their relationship with social processes from an interdisciplinary perspective. Also examines how social and technical innovations provide new opportunities to address global health.

Prerequisite: PHC 4101 and Public Health major with Junior standing or higher.

# PHC 3453 Leveraging the Arts to Promote Public Health 3 Credits

# Grading Scheme: Letter Grade

Overview of the arts and health research landscape with an emphasis on arts in public health. As cross-sector collaboration within public health rises in prominence, it is essential that future public health leaders understand how and why the field of art can be leveraged. **Prereguisite:** PHC 4101 or PHC 2100.

## PHC 3621 Ethics in Artificial Intelligence: Who's Protecting Our Health 3 Credits

## Grading Scheme: Letter Grade

Explores the ethical challenges of using artificial intelligence in Healthcare and the practice of Public Health. Students will examine predictive models used for making important health decisions, addressing factors that contribute to trustworthy artificial intelligence in health, and analyzing potential for bias, risk, and social inequity in assessing and delivering health and public health interventions.

Prerequisite: PHC 3793.

# PHC 3678 Global Health Disparities and Disabilities 3 Credits

## Grading Scheme: Letter Grade

Provides students, interested in addressing health disparities among people living with disabilities, with the knowledge and understanding of health determinants that maintain their current health status globally. Special focus on low- and middle-income countries.

Prerequisite: Public Health (PBH-BPH), Health Science (HES\_BHS), or Communication Sciences and Disorders (CSD\_BHS) major with junior standing or higher.

## PHC 3793 Higher Thinking for Healthy Humans: AI in Healthcare and Public Health 3 Credits

# Grading Scheme: Letter Grade

Covers history, foundational concepts and methods on artificial intelligence (AI), focusing on public health and healthcare applications, including hands-on practice on graphical/highlevel AI software. The course neither provides advanced statistical/machine learning training nor programming. **Prerequisite:** STA 2023 or equivalent.

# PHC 4024 Applied Epidemiology 3 Credits

# Grading Scheme: Letter Grade

Principles and methods of epidemiological investigation focusing on both infectious and noninfectious diseases. Emphasizes outbreak investigations, field epidemiology and epidemiology careers.

Prerequisite: HSC 3057, HSC 3502, HSC 4558, PHC 4101, and Health Science and Public Health majors/minors only.

## PHC 4094 Introduction to Biostatistics for Health Science and Public Health 3 Credits

## Grading Scheme: Letter Grade

Methods and public health applications for analysis of variance, correlation, simple linear regression, multiple linear regression, nonparametric and distribution-free statistical methods, and some basic concepts about survival analysis. Public health applications using statistical software. Writing data analysis reports.

Prerequisite: STA 2023.

## PHC 4117 Public Health Management Leadership 3 Credits

## Grading Scheme: Letter Grade

Provides knowledge relevant to leading public health organizations while effectively managing and motivating employees. Includes organizational behavior and theories to examine management, leadership, and application of skills in delivering public health programs. **Prerequisite:** HSA 3111 and HSC 3502 and HSC 4558 and PHC 4101 and Public Health major.

# PHC 4320 Environmental Concepts in Public Health 3 Credits

## Grading Scheme: Letter Grade

Surveys major environmental health topics by examining sources, routes, media, and health outcomes associated with biological, chemical, and physical agents in the environment. Introduces the economic and legal frameworks associated with environmental health issues and public health. **Prerequisite:** PHC 4101.

# PHC 4418 Social, Economic, and Environmental Drivers of Health 3 Credits

# Grading Scheme: Letter Grade

Overview of the social determinants of health and their impact on health and quality of life. Explore social, economic, environmental, and political factors contributing to health and health disparities across various populations.

Prerequisite: PHC 4101 or instructor approval.

# PHC 4792 Data Visualization in the Health Sciences 3 Credits

# Grading Scheme: Letter Grade

Learn the foundations of information visualization and sharpen skills in understanding, evaluating, and presenting Al-driven public health data. R is primarily used to explore concepts in graphic design, storytelling, data wrangling and plotting, biostatistics, and artificial intelligence. **Prerequisite:** STA 2023 or equivalent.

# PHC 4796C Artificial Intelligence in Psychological and Brain Sciences 3 Credits

# Grading Scheme: Letter Grade

Builds upon the artificial intelligence (AI) foundations taught in PHC 3793 to train health science-focused students to examine how AI and Machine Learning (ML) methods are applied in psychology and related brain sciences, as well as to address the factors that contribute to appropriate use of AI. The course neither provides nor necessitates prior programming knowledge, advanced statistical, or machine learning training. **Prerequisite:** PHC 3793 or equivalent AI Foundations course or permission from instructor.