PHC 6001: Principles of Epidemiology in Public Health

Format: Online Asynchronous
Instructor: Krishna Vaddiparti, PhD, MPE, MSW
Term: Summer C
Credits: 3
Grading Scheme: Letter
Prerequisites: None.

Epidemiology methods frequently used to study disease patterns in community and clinic-based populations. Includes distribution and determinants of health-related states or events in specific populations and application to control of health problems.

PHC 6002: Epidemiology of Infectious Diseases

Format: Online Asynchronous
Instructor: Jerne Shapiro, MPH
Term: Summer C
Credits: 3
Grading Scheme: Letter
Prerequisites: PHC 6001 and PHC 6052 or PHC 6050, or permission from the instructor.

Epidemiology, prevention, and control of infectious diseases affecting local, national, and global community health; epidemiologic methods used in disease surveillance and measures used in slowing or preventing spread of disease.

PHC 6009: Biology and Epidemiology of HIV/AIDS

Format: Online Asynchronous
Instructor: Robert L. Cook, MD, MPH, and Veronica Richards, MPH, CPH
Term: Summer C
Credits: 3
Grading Scheme: Letter
Prerequisites: None.

Examining the biological process by which HIV causes infection and AIDS, including the physiologic and cellular processes involved in HIV infection and treatment. Developing skills in finding and interpreting current epidemiologic data on HIV/AIDS, including risk factors, comorbid health issues, special populations, and health outcomes. Overview of HIV prevention strategies and their effectiveness. Special emphasis on epidemiology of HIV/AIDS in the rural south.

PHC 6011: Epidemiology Methods II

Format: In Person
Instructor: Catalina Lopez-Quintero, MD, PhD
Term: Summer B
Credits: 3
Grading Scheme: Letter
Prerequisites: PHC 6000, PHC 6052, and PHC 6053, or permission from the instructor.

Analytic methods in epidemiology with a foundation in applied epidemiological analysis and experience in peer-review productivity based on secondary data analysis.
PHC 6041: Landmarks in Psychiatric Epidemiology

Format: Online Asynchronous
Instructor: Catherine W. Striley, PhD, MSW, ACSW, MPE
Term: Summer C
Credits: 2
Grading Scheme: S/U
Prerequisites: None.
Landmarks in psychiatric epidemiology are reviewed with an emphasis on student discovery of studies with enduring value.

PHC 6937: Computational Multi-omics

Format: In Person
Instructor: Huaizhen Qin, PhD
Term: Summer A
Credits: 1
Grading Scheme: Letter
Prerequisites: PHC 7594, PHC 6000, PHC 6011, and PHC 6050C or PHC 6052, or instructor permission. Students must be familiar with R scientific programming languages. This course assumes fundamental competency in genetic epidemiology and statistical genetics vocabulary and principles. This course will offer master’s and PhD students with an updated introduction to computational multi-omics. It will introduce the computational approaches to unravel the multi-omics (i.e., genetics, epigenetics, gene expression, and metabolite) mechanisms of a complex human disease. Algorithms and packages for both unrelated individuals and extensive pedigrees in various populations will be inspected. The course will cover population and pedigree based whole-genome gene mapping, mixed effects Cox regression analyses, and surrogate variable analyses in multi-omics experiments. For illustration purpose, public and simulated omics and phenotypic data sets will be examined.

PHC 6937: Core Seminar in the Translational Science of Alcohol and HIV Infection

Format: Online Synchronous
Instructor: Robert Leeman, PhD
Term: Summer A
Credits: 1
Grading Scheme: Letter
Prerequisites: None.
In addition to alcohol and HIV research, this course will also cover several professional development topics including the academic job search process, non-academic jobs and “How to be a professor.” Seminars will be led by a rotating group of faculty-level experts, primarily from here at UF, but with some external speakers.

PHC 7083: Computational Epidemiology in Population Science

Instructor: Mattia Prosperi, MEng, PhD, and Simone Marini, PhD
Term: Summer A
Credits: 2
Grading Scheme: Letter
Prerequisites: PHC 6000, or permission from the instructor.
Provides students training in computational models for epidemiology, enabling them to formulate and test appropriate modeling hypotheses for large scale and heterogeneous study designs.
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<th>Course Code</th>
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<tbody>
<tr>
<td>PHC 7427</td>
<td>Ethics in Population Science</td>
<td>In Person</td>
<td>Catherine W. Striley, PhD, MSW, ACSW, MPE</td>
<td>Summer A</td>
<td>2</td>
<td>COM C2-33</td>
<td>S/U</td>
<td>Advanced degree or PhD candidacy, or permission of the instructor.</td>
<td>Covering federally mandated topics in the Responsible Conduct of Research: Data Acquisition, Management, Sharing, Ownership; Conflict of Interest/Commitment; Human Subjects; Animal Welfare; Research Misconduct; Publication Practices and Responsible Authorship; Mentor/Trainee Responsibilities; Peer Review; and Collaborative Science. This ethics course is for those enrolled in research intensive graduate programs.</td>
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<td>PHC 7594</td>
<td>Genetic Epidemiology</td>
<td>In Person</td>
<td>Jinying Zhao, MD, PhD</td>
<td>Summer A</td>
<td>3</td>
<td>HPNP G-108</td>
<td>Letter</td>
<td>PHC 6000, PHC 6011, and PHC 6050, or permission from the instructor.</td>
<td>This course covers fundamental concepts and principles in genetic epidemiology. At the completion of this course, students are expected to critically discuss literature, design and conduct basic genetic analysis, and interpret research finding. Advanced methods course for PhD program.</td>
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<td>PHC 7727</td>
<td>Grant Writing for Population Health Research</td>
<td>TBD</td>
<td>Linda B. Cottler, PhD, MPH, FACE, and Volker Mai, PhD, MPH</td>
<td>Summer C</td>
<td>2</td>
<td>Location TBD</td>
<td>Letter</td>
<td>PHC 6011, or permission from the instructor.</td>
<td>This course provides practical instruction in the grant writing process with a specific focus on National Institutes of Health (NIH) procedures. It provides students with experience in writing a full grant application and in reviewing others’ grant applications. It also contains a mock grant review session to assist students in understanding the process and content of grant review.</td>
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