



THE UNIVERSITY OF ARIZONA

Mel & Enid Zuckerman  
College of Public Health

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University of Arizona

## BIOS/EHS/EPID HPS 585 Public Health Fundamentals for Researchers

**Catalog Description:** The fundamental principles of public health are presented for students in any graduate academic program. The course explores theoretical aspects of public health and provides practical application designed to improve understanding and performance of researchers in public health settings. Mastery of course objectives will provide academic graduate students with a clear working knowledge of public health basics. (3 units)

### Course Topics:

- Core Functions and Essential Services
- Quantitative & Qualitative Measures
- Primary, Secondary & Tertiary Prevention
- Trends in Morbidity & Mortality
- Biologic & Genetic factors & Population Health
- Role of Evidence in advancing PH
- Behavioral and Psychosocial impacts on population health
- One Health: Ecologic Perspective of Animal, Ecosystem, Human
- Health Disparity
- Environmental impacts on population Health
- Globalization and Health
- Food Safety

**Course Objectives:** During this course, students will:

- Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health.
- Identify the core functions of public health and the ten Essential Services.
- List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program.
- Explain the critical importance of evidence in advancing public health knowledge.
- Explain effects of environmental factors on a population's health.
- Explain behavioral and psychological factors that affect a population's health.
- Explain how globalization affects global burdens of disease.

**Learning Outcomes (Competencies Obtained):** Upon completion of this course students will be able to:

1. Understand how the data illuminates ethical, political, scientific, economic, and overall public health issues
2. Understand basic research designs used in public health
3. Interpret and present accurately and effectively demographic, statistical, and scientific information for professional and lay audiences adapting and translating public health concepts to individuals and communities
4. Identify and examine the role of cultural, social, ethnic, religious, spiritual, and behavioral factors in determining disease prevention health promoting behavior, and health service organizational and delivery
5. Define, assess, and understand the health status of population, determinants of health and illness, factors contributing to health promotion and disease prevention, and factors influencing the use of health services
6. Understand research methods in all basic public health sciences
7. Apply the basic public health sciences including behavioral and social sciences, biostatistics, epidemiology, environmental public health, and prevention of chronic and infectious diseases and injuries
8. Understand the historical development and structure of state, local, and federal public health agencies
9. Develop strategies for determining priorities