



**BAKER COLLEGE**  
**STUDENT LEARNING OUTCOMES**

**PUH3110**  
**3 Semester Credit Hours**

**Student Learning Outcomes and Enabling Objectives**

1. Explain the field of epidemiology and its key terms.
  - a. Describe important historic events in epidemiology.
  - b. Describe the foundations and role of epidemiology in public health practice.
  - c. Describe the difference between epidemic, endemic, and pandemic.
  - d. Differentiate between descriptive and analytic epidemiology.
  
2. Examine association and causation of epidemiology in chronic and acute disease.
  - a. Explain the difference between measures of association and causation.
  - b. Identify the complexity and different perspectives of public health problems.
  - c. Explain the 'web of causation' and tools to identify contributing factors.
  
3. Investigate the concepts of epidemiology related to the clinical and public health environments.
  - a. Describe the role of general health and population indicators of health status.
  - b. Distinguish between prevalence and incidence.
  - c. Describe reasons for screening of disease in the community, including infectious and mass disease screening.
  
4. Differentiate study designs, such as observational, experimental, and cohort.
  - a. Explore the characteristics of observational, experimental, and cohort epidemiology.
  - b. Summarize simple data analysis.
  - c. Describe ethical considerations when conducting an epidemiological study.

**Big Ideas and Essential Questions**

**Big Ideas**

- Field of epidemiology
- Association and causation of disease in epidemiology
- Clinical and public health epidemiology
- Study Designs

## **Essential Questions**

1. How did the field of epidemiology develop?
2. What is the role of epidemiology in determining association and causality of community disease?
3. What is the role and reasons for community screening in epidemiology?
4. How are descriptive and analytic studies used in epidemiology?

These SLOs are not approved for experiential credit.

**Effective: Fall 2024**