

## Educational Objectives, Fall 2012 and Spring 2013

<b>Educational Objectives for all MPH students</b>
1. To provide students with core knowledge and competencies in the five areas of public health: epidemiology, statistics, environmental health, health services administration, and the behavioral and social sciences. (ASPH MPH competencies)
2. To provide students with an opportunity to integrate and apply skills they have mastered in their curriculum in a public health setting.
3. To provide students with a culminating experience where they demonstrate their mastery of Public Health content and discipline specific content.
4. To provide students with multiple opportunities to develop writing and speaking skills, presentation skills, and teamwork skills.
5. To provide students with the experience to review science-based literature, synthesize its content, and apply evidence-based practices in the community.
6. To prepare students to enter the Public Health workforce and assume positions of leadership through progressive career development and demonstrate Public Health professionalism.
7. Each student will pursue one of the five core areas of Public Health in-depth completing the required credits for an MPH degree as outlined for each of the five disciplines.

## Epidemiology Objectives, Fall 2012 and Spring 2013

<b>Epidemiology Educational Objectives</b>
1. Conceptualize and apply the basic epidemiological principles, including but not limited to: the causal chain model.
2. Conceptualize and apply the basic epidemiological principles, including but not limited to: the natural history model.
3. Conceptualize and apply the basic epidemiological principles, including but not limited to: incidence and prevalence.
4. Conceptualize and apply the basic epidemiological principles, including but not limited to: attributable risk, relative risk, and odds ratios.
5. Conceptualize and apply the basic epidemiological principles, including but not limited to: case-fatality, and mortality rates.
6. Evaluate the advantages, disadvantages, proper application and types of data that result from various study designs used in epidemiological research.
7. Contrast the descriptive and analytic approaches in epidemiology.
8. Discuss and identify examples of major categories of bias, the potential for their occurrence in specific study situations, and proposed methods to evaluate and/or reduce their influence on the measures of major interest.
9. Understand principles of screening for diseases and risk factors, including sensitivity, specificity, and predictive values of negative and positive tests.

10. Employ methods of standardization or adjustment for factors such as age or gender in a study population.
11. Formulate and pursue a research questions.
12. Describe methods for assessing public health data and the collection of data.
13. Conduct data analyses and interpret the results of theses analyses.
14. Contribute to current published epidemiological literature.
15. Acquire professional communication skills, as demonstrated by written and oral presentations of epidemiological findings.
16. Know the fundamentals of the appropriate use of humans in epidemiologic research.
17. Conduct original research by identifying a problem, preparing a research proposal, carrying out the research, presenting the research finding, and orally defending a written thesis.
18. Apply and integrate program knowledge and skills through practical field experience, and fulfill other specific MPH field practice learning objectives.