

**MPH in Epidemiology competencies**

| Competencies/Learning Outcomes   | Public Health Core |          |          |          |          | Dept. Core |          |                 |                |          | EPID     |          |          |                    |
|--|--------------------|----------|----------|----------|----------|------------|----------|-----------------|----------------|----------|----------|----------|----------|--------------------|
|  | HPEB 700           | HSPM 700 | EPID 701 | BIOS 701 | ENHS 660 | BIOS 710   | EPID 741 | EPID 745 (Fall) | EPID 745 (Spr) | BIOS 745 | BIOS 757 | EPID 730 | EPID 758 | EPID 798 Practicum |
| Goal 1. LO1. * Students will demonstrate an understanding of the following:  |                    |          |          |          |          |            |          |                 |                |          |          |          |          |                    |
| a. fundamental principles and practices in health promotion, education, and behavior;  | P                  |          |          |          |          |            |          |                 |                |          |          |          |          |                    |
| b. organization, principles, and practices in health administration;   |                    | P        |          |          |          |            |          |                 |                |          |          |          |          |                    |
| c. principles and practices in epidemiology, and tools for translating epidemiological findings into public health action;   |                    |          | P        |          |          |            | R        |                 |                |          | R        |          | P        |                    |
| d. public health statistical applications;   |                    |          |          | P        |          |            |          |                 | R              | P        |          |          |          |                    |
| e. environmental health from the perspective of the earth as a complex, dynamic system.  |                    |          |          |          | P        |            |          |                 |                |          |          |          |          |                    |
| Goal 2. LO1. Students will differentiate between common epidemiologic study designs.   |                    |          | P        |          |          |            | P        |                 |                |          | R        | R        |          |                    |
| Goal 2. LO2. Students will demonstrate the ability to calculate and interpret measures of association.   |                    |          | P        |          |          |            | P        |                 |                | R        | R        | R        |          |                    |
| Goal 3. LO1. Students will understand basic ethical principles pertaining to public health research and practice.  |                    |          |          |          |          |            | P        | R               |                |          |          | P        |          |                    |
| Goal 3. LO2. Students will describe the roles of history, power, privilege, and structural inequality in producing health disparities.   |                    |          |          |          |          |            |          |                 |                |          |          | P        |          |                    |
| Goal 3. LO3. Students will explain how the findings of a program evaluation can be used.   |                    |          |          |          |          |            |          |                 |                |          |          | P        |          |                    |
| Goal 3. LO4. Students will explain how individuals, social networks, organizations and communities may be viewed as systems in the analysis of public health problems.   |                    |          |          |          |          |            |          | R               |                |          |          | P        |          |                    |
| Goal 4. LO1. Students will create and manipulate datasets and analyze data using appropriate statistical methods and software packages.  |                    |          |          | P        |          | P          |          |                 |                | P        |          |          |          |                    |
| Goal 4. LO2. Students will demonstrate proficiency in creating tables and reports using appropriate software packages.   |                    |          |          |          |          | P          |          |                 |                |          |          |          |          |                    |
| Goal 4. LO3. Students will correctly interpret results from statistical analyses.  |                    |          |          |          |          |            | R        |                 |                | P        |          |          |          |                    |
| Goal 5. LO1. Students will gain practical skills in a public health practice setting.  |                    |          |          |          |          |            |          |                 |                |          |          | R        | P        |                    |
| Goal 5. LO2. Students will demonstrate proficiency in public health practice by successfully completing at least two of the following competencies during their practicum: (1) designing a public health program, (2) monitoring and evaluating a public health program, (3) writing progress report for funding agency or reporting authority, (4) participating in data analysis related to public health program, (5) participating in applying for funding for public health program, (6) participating in public health related service delivery. |                    |          |          |          |          |            |          |                 |                |          |          |          | P        |                    |

\* Core competencies

P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced