

| | Description | MS Core Classes | | | | | Epi Specialization | | | | |
|-------|--|-----------------|-------|-------|--------|-------|--------------------|-------|-------|-------|-------|
| | | PH 600 | PH655 | PH663 | PH 656 | PH658 | PH664 | PH669 | PH747 | PH699 | PH700 |
| MSE1. | MSE1. Identify key sources of data for epidemiological purposes. | | | X | | | | | | | |
| MSE2. | MSE2. Interpret results of statistical analyses found in public health studies. | | X | | X | X | | | X | | |
| MSE3. | MSE3. Analyze a complex epidemiologic data set using at least one computer-aided tool, such as SAS, SPSS, R, or Stata. | | X | | X | X | | | X | | |
| MSE4. | MSE4. Communicate the results of research both orally and in writing, with the written presentation meeting the current standards of publication in refereed journals. | | X | | | | | | | X | X |
| MSE5. | MSE5. Select quantitative data collection methods appropriate for a given public health context. | | | X | | | X | X | | | |
| MSE6. | MSE6. Analyze quantitative data using bio-statistics, informatics, computer-based programming and software, as appropriate. | | | | | | X | X | | | |
| EPI1. | EPI1. Identify public health practices for disease control including surveillance, screening and outbreak investigation, including the use of biomarkers and molecular biology. | | | X | | | X | X | | | |
| EPI2. | EPI2. Demonstrate proficiency in computer-based data collection, management and analysis using major statistical software and fundamental strategies for bio-statistical analysis. | | | | X | X | X | | X | | |
| EPI3. | EPI3. Discuss how public health biology - the biological, ecological, and molecular context of public health - impacts public health practice. | | | | | | | | X | | |
| EPI4. | EPI4. Apply epidemiological specific theoretical constructs, research design, research methodology, and analytic strategies. | | | | X | | X | X | X | | |
| EPI5. | EPI5. Develop a scientific hypothesis, beginning with a review of existing literature, and design an epidemiological study to assess the hypothesis validly and efficiently. | | | | | | X | X | | | |

PH 600 Public Health Foundations

PH655 Biostatistics I

PH663 Principles of Epidemiology I

PH656 Biostatistics II

PH658 Computer Applications in Public Health

PH664 Principles of Epidemiology II

PH 669 Epidemiological Study Design

PH747 Statistical Methods in Epidemiological Research

PH699 Directed Reading and Research

PH 700 Thesis Research