

Master of Health Sciences - Public Health outcomes

1. **Biostatistics:** Biostatistics is the development and application of statistical reasoning and methods in addressing, analyzing and solving problems in public health; health care; and biomedical, clinical and population-based research.

Outcome: Students will be able to interpret and present the results of the data analysis in an effective manner

Outcome: Students will be able to distinguish among the different measurement scales and the implications for selection of statistical methods to be used based on these distinctions

Outcome: Students will be able to apply descriptive and inferential methodologies according to the type of study design for answering a particular research question

Outcome: Students will be able to apply descriptive techniques commonly used to summarize public health data

Outcome: Students will be able to apply common statistical methods for inference

- Measure: Final project
- Description: The final project includes data collection (students "generate " the data based on a questionnaire they designed), data file management, data analysis, report writing (students analyze data and provide a written report discussing the results)
- Target: 80% of students complete project with a B or better
- Timeline: data collected in AHS 604
- Responsible individual: Course instructors

2. **Environmental Health Sciences:** Environmental health sciences represent the study of environmental factors including biological, physical and chemical factors that affect the health of a community

Outcome: Students will be able to describe genetic, physiologic and psychosocial factors that affect susceptibility to adverse health outcomes following exposure to environmental hazards

Outcome: Students will be able to discuss risk management and risk communication in the regulation of toxic substances in health policy

Outcome: Students will be able to identify current environmental health issues

Outcome: Students will be able to discuss possible solutions to identified environmental health issues

- Measure: Research paper
- Description: Students identify and discuss an environmental health issue, its impact on the community, and possible solutions
- Target: 80% of students complete project with a B or better
- Timeline: data collected in AHS 614, Spring semester
- Responsible individual: Course instructors

3. **Epidemiology:** Epidemiology is the study of patterns of disease and injury in human populations and the application of this study to the control of health problems

Outcome: *Students will be able to describe a public health problem in terms of magnitude, person, time and place*

Outcome: *Students will be able to draw appropriate inferences from epidemiologic data*

Outcome: *Students will be able to communicate epidemiologic information to lay and professional audiences*

Measure: Epidemiology Research Paper

- Description: The epidemiology research paper is designed for students to demonstrate their comprehension of Epidemiology study designs, data analysis, statistical decision-making, and presentation. No field data will be collected. Students will "generate" the data or use published data from National/State survey results for analysis and presentation.
- Target: 80% of student's complete project with a B or better
- Timeline: data collected Fall 2014 in AHS 612 and every three years thereafter
- Responsible Individual: Course Instructors

Measure: Weekly Quizzes

- Description: The weekly quizzes will be used to assess student's ability to apply and draw inferences from given data, evaluate epidemiologic reports, explain the importance of epidemiological data, calculate basic measures, and communicate the correct terminology.
- Target: 80% of student's complete exams with a B or better
- Timeline: data collected Fall 2014 in AHS 612 and every three years thereafter
- Responsible Individual: Course Instructors

4. **Health Policy Management:** Health policy management is a multidisciplinary field of inquiry and practice concerned with the delivery, quality and costs of health care for individuals and populations. These focuses assume a managerial and a policy concern with the structure, process and outcomes of health services including the costs, financing, organization, outcomes and accessibility of care.

Outcome: *Students will be able to describe and apply the main components and issues of the delivery of health services and public health systems in the U.S.*

- Measure: Assigned chapter and supplemental readings
- Description: students will read the chapter and additional readings. Afterwards, students will write a two-page document addressing a specific issue from the readings. The reading assignments will be graded based on integration of material from the chapter and additional readings, formulation of an argument, and quality of the writing.
- Target: 80% of students complete project with a B or better
- Timeline: data collected in AHS 626, Fall semester
- Responsible individual: Course instructors

Outcome: *Students will be able to describe the legal and ethical issues in public health and health services*

- Measure: Health Policy Brief
- Description: Students will write a health policy brief which includes the following information:
 - Description of a selected public health, health administration or health services issue (e.g. Meaningful Use, HIPAA, ACA, etc.)
 - Explanation of the importance of this issue
 - Identified need for change
 - Identified solution to leverage change (with explanation)
 - Necessary resources (human, financial, legal, partnerships, other)
- Target: 80% of students complete project with a B or better
- Timeline: data collected in AHS 626, Fall semester
- Responsible individual: Course instructors

Outcome: *Students will be able to apply "systems thinking" for resolving organizational problems*

- Measure: Case Study Analysis and Wiki
- Description: Students will work in groups and answer a case study using a Wiki. Students will be assigned groups and a specific case study to answer. Cases will be provided that present a variety of problems ranging from minor difficulties encountered in day-to-day management situations to more difficult problems involving management principles and organizational difficulties
- Target: 80% of students complete project with a B or better
- Timeline: data collected in AHS 626, Fall semester
- Responsible individual: Course instructors

- Measure: Assigned chapter and supplemental readings
- Description: students will read the chapter and additional readings. Afterwards, students will write a two-page document addressing a specific issue from the readings. The reading assignments will be graded based on integration of material from the chapter and additional readings, formulation of an argument, and quality of the writing.
- Target: 80% of students complete project with a B or better
- Timeline: data collected in AHS 626, Fall semester
- Responsible individual: Course instructors

5. **Social and Behavioral Sciences:** The social and behavioral sciences in public health address the behavioral, social and cultural factors related to individual and population health and health disparities over the life course. Research and practice in this area contributes to the development, administration and evaluation of programs and policies in public health and health services to promote and sustain healthy environments and healthy lives for individuals and populations.

Outcome: *Students will be able to plan a theory-based health promotion program*

Outcome: Students will be able to develop an evaluation plan for a health promotion program

Outcome: Students will be able to identify the causes of social and behavioral factors that affect health of individuals and populations

Outcome: Students will be able to interpret the role of race, culture, ethnicity, class, and gender that influence physical and mental health

Outcome: Students will be able apply evidence-based approaches in the development and evaluation of social and behavioral science interventions

- Measure: Health program proposal
- Description: Students use theory to develop a program to address a specific health issue for a specified population
- Target: 80% of students complete project with a B or better
- Timeline: Data collected in AHS 617, Fall semester
- Responsible individual: Course instructors