

# **School of Public Health and Community Medicine**

## **Learning Objectives Monitoring**

It was noted in our accreditation site visit report that while the School's programs had well-developed, specific and measurable learning objectives, there was no apparent system to assure that students successfully completing a program's required curriculum had fulfilled the program's stated objectives. Although each program devises its curriculum (including practicum, internship and other experiential requirements, written and/or oral comprehensive exam(s), and a thesis, dissertation or capstone project) to assure that its learning objectives are met, we did not explicitly describe the system by which these programmatic learning objectives are monitored and assured.

The various programs and School-wide Curriculum Committee, assisted by the Dean's Office, have devised a system whereby learning objectives for each program will be mapped to specific courses and other required educational experiences, as documented by 1) the learning objectives for courses and 2) the expectations for capstone and experiential requirements. In this fashion, the alignment between program and course learning objectives has been documented. An example of the linking matrix is given below.

Furthermore, syllabi of all required courses will be reviewed annually to confirm that course learning objectives adequately meet the goals of each program that requires the course.

It is also important to stress that throughout their academic programs within the school students have an Advisor (faculty) and a Student Program Coordinator (staff) that track the progress of students in their programs. The faculty advisors meet with students regularly and monitor their progress throughout the program. In addition, before graduation, every student's program is checked by both the faculty advisor and the Student Program Coordinator to assure that all program requirements have been met. In this way, both his/her faculty advisor and the Student Program Coordinator monitor every student. This process not only certifies that program requirements are adequately met (students must achieve a numeric grade of 3.0 or higher for all required courses), but also encourages each student to achieve his/her own individual learning goals.

## MPH in Epidemiology

Learning Objectives	How Met
Meet the learning objectives for the MPH core curriculum:	
Define, assess, and understand the health status of populations, determinants of health and illness, factors contributing to health promotion and disease prevention, and factors influencing the use of health services	HSERV 511; HSERV 510; EPI 512; ENVH 511
Apply basic public health sciences to the development and improvement of public health programs for the prevention of disease and the promotion of public health and well being.	HSERV 511; HSERV 510 or 581 or 582; EPI 512; ENVH 511; BIOST 511, Practicum, Thesis
Determine appropriate use of data and statistical methods for problem identification and resolution, and for program planning, implementation, and evaluation	BIOST 511; EPI 512; EPI 513; Practicum
Evaluate the integrity and comparability of data and identify gaps in data sources	BIOST 511; EPI 512; EPI 513; EPI 514; Thesis
Understand how data illuminate ethical, political, scientific, economic, and overall public health issues	HSERV 511; HSERV 510 or 581 or 582; ENVH 511
Understand the historical development and structure of state, local, and federal public health agencies	HSERV 511; ENVH 511
Collect and summarize data relevant to a public health policy issue and articulate the health, fiscal, administrative, legal, social, and political implications of each policy option	HSERV 511; ENVH 511; Practicum; Thesis
Decide on an appropriate course of action and write a clear policy statement	HSERV 511; HSERV 510 or 581 or 582; Practicum
Develop a policy implementation plan and mechanisms for monitoring and evaluating such an implementation plan	HSERV 511; ENVH 511; Practicum
Understand how disciplines other than their own analyze public health problems and develop solutions to those problems	HSERV 511; HSERV 510 or 581 or 582
Communicate effectively with colleagues from other disciplines	HSERV 511; ENVH 511; HSERV 510 or 581 or 582
Lead and participate in multidisciplinary groups to address specific public health problems and issues	HSERV 510 or 581 or 582; Practicum
Communicate effectively with lay audiences	HSERV 510 or 581 or 582; Practicum
Advocate for public health programs and resources	HSERV 511; HSERV 510 or 581 or 582; Practicum
Identify the role of cultural, social, and behavioral factors in determining disease, disease prevention, health promoting behavior, and medical service organization and delivery	HSERV 511; HSERV 510 or 581 or 582
Interact sensitively, effectively, and professionally with persons from diverse cultural, socioeconomic, educational, and professional backgrounds, and with persons of all ages and lifestyle preferences	HSERV 511; HSERV 510 or 581 or 582; Practicum
Define and calculate measures of disease frequency and measures of association between risk factors and disease	EPI 512
Describe the major epidemiologic research study designs and their advantages and limitations	EPI 512; EPI 513
Describe the major sources of bias in epidemiologic research (confounding, selection bias and measurement error) and the ways to evaluate and reduce the bias	EPI 512; EPI 513
Evaluate effect modification	EPI 513
Apply criteria to support whether an association is causal	EPI 512; EPI 513
Understand the basic terms and methods used in outbreak investigation, infectious disease epidemiology, chronic disease epidemiology, disease prevention trials and evaluation of screening tests	EPI 512; EPI 513
Critically review the scientific literature, synthesize the findings across studies, and make appropriate public health recommendations based on current knowledge	EPI 512; EPI 513
Design an epidemiologic study to address a question of interest	EPI 512; EPI 513; Thesis
Interpret results of an epidemiologic study, including the relation to findings from other epidemiologic studies, the potential biological and/or social mechanisms, the limitations of the study, and the public health implications	EPI 512; EPI 513
Write a clear description of the rationale, methods, results and interpretation of an epidemiologic investigation	Thesis
Apply epidemiologic skills in a public health setting, specifically in the formulation or application of public health programs or policies	EPI 512; EPI 513; Thesis; Practicum

## **Description of Courses:**

### **BIOST 511 Medical Biometry I (4)**

Presentation of the principles and methods of data description and elementary parametric and nonparametric statistical analysis. Examples are drawn from the biomedical literature, and real data sets are analyzed by the students after a brief introduction to the use of standard statistical computer packages. Statistical techniques covered include description of samples, comparison of two sample means and proportions, simple linear regression and correlation.

### **ENV H 511 Environmental and Occupational Health (3)**

Effects of exposure to chemical, physical, and biological agents, embracing the community and workplace environments. Current issues, using specific cases from recent literature as basis for classroom discussion and written assignments.

### **EPI 512 Epidemiologic Methods I (4)**

Principles and methods of epidemiology. Covers measures of disease frequency, measures of effect, causal inferences, descriptive epidemiology, study types, misclassification, and effect modification. Designed for students who want to take 513. Prerequisite: prior or concurrent enrollment in BIOST 511 or equivalent.

### **EPI 513 Epidemiologic Methods II (4)**

Continuation of 512. Considers how designs of epidemiologic studies may be constructed to maximize etiologic inferences. Covers confounding, randomized trials, cohort studies, case-control studies, and selected topics. Prerequisite: EPI 512.

### **HSERV 510 Society and Health (3)**

Analysis of social inequalities in health and service use by class, gender, and the social construction of race. Examines biological, cultural, social, political, and economic determinants which consistently put certain minority groups within Eurocentric societies at higher risk for inequitable health status and provision. Prerequisite: HSERV 511 or equivalent or permission of instructor.

### **HSERV 511 Introduction to Health Services and Public Health (3-4)**

History, organization, and effectiveness of United States health care and public health systems. Determinants of health, need, and utilization. Public and private financing. Supply and provision of personal and public health services. Managed care. Government and private sector roles.

### **HSERV 581 Health Promotion and Disease Prevention (4)**

Health promotion planning, implementation, and evaluation models studies regarding strengths, weaknesses, and effectiveness. Students critique strategies to modify behavioral factors that influence lifestyle of individuals, including decisions influencing their reciprocal relationship with environmental factors that affect the health of individuals, organizations, and communities. Prerequisite: HSERV 511.

### **HSERV 582 Health Behavior and Preventive Medicine ([3-4])**

Overview of theoretical perspectives in health behavior at the individual, interpersonal, and community level. Focuses on increasing skills in describing, applying, and integrating these frameworks in the design and evaluation of health promotion interventions. Prerequisite: HSERV 511 or permission of instructor.