

## **Chesapeake Project: Integrating Sustainability across the Curriculum**

Dr. Natalie Slopen, Assistant Professor

Department of Epidemiology and Biostatistics, School of Public Health  
EPIB301: Epidemiology for Public Health Practice

EPIB 301 was introduced in 2015 as a core course within the new undergraduate Public Health Science Program at UMD College Park. Epidemiology—the fundamental science underlying public health—is the study of the distribution and determinants of health and diseases at the population-level, including infectious and chronic diseases, mental disorders, community and environmental health hazards, and unintentional injuries. This course introduces students to basic epidemiologic methods, and the application of epidemiologic research to public health practice. The goal of the course is to enable students to become informed and intelligent consumers of epidemiologic literature and to provide a basis for further studies and careers in public health sciences and other related fields. This course has traditionally included a unit on environmental epidemiology, but did not include an explicit focus on the concept of sustainability.

As a result of my participation in the Chesapeake Project, I will introduce a new course learning objective: *Apply epidemiologic principles to evaluate the impact of environmental sustainability initiatives on human behavior and health.* In order to address this objective, I will incorporate concepts related to sustainability throughout the semester. Sustainability concepts will be woven into the course via reading assignments, videos, and the examples used within problem sets. I will also include a one hour lecture and a one hour small group section specifically dedicated to the application of epidemiologic methods for the evaluation of sustainability initiatives. This lecture and the small group sessions will be designed to inform students about sustainability initiatives on the UMD College Park campus. Specifically, I have requested that a representative from the UMD Office of Sustainability will develop a lecture to introduce the concept of sustainability, highlight the role of epidemiologists within sustainability efforts, and provide an overview of 3-4 sustainability initiatives on the UMD College Park campus that have implications for human health. In Sections the following week, students will work in groups to develop epidemiologic study designs to evaluate the impact of these sustainability initiatives. Students will be asked to identify an appropriate study design, measures, and analysis plan for the initiative of their choosing, and then present their design to the class.