

Bayreuth, 15.03.2023

Special Lecture in SS 2023: Managerial Epidemiology

by Prof. Dr. Eduardo Simoes, University of Missouri

Master students from the health economics and management program have the unique opportunity to participate in the lecture Managerial Epidemiology taught by Prof. Dr. Eduardo Simoes, University of Missouri. The course comprises about 24h of lectures, case studies and tutorials and will be offered during 4 days: **May 15-17** (days 1-3) and **May 19** (day 4). Participation in the assignments is mandatory, as they are part of the teaching concept. Officially registering the credits received is optional. The credits count towards module F „Ergänzungsmodulebereich“.

If interested, please register asap in elearning for the course „Blockveranstaltung Managerial Epidemiology im SS 2023“. Deadline is April 24. Please note that the number of participants is limited. In case that there are too many candidates, a lottery will decide. We will communicate the decision April 28 latest.

For questions, please contact johanna.dudek@uni-bayreuth.de.

Lecturer

Prof. Simoes is chair of the Department of Health Management and Informatics at the University of Missouri-Columbia School of Medicine and is MU's Health Management and Informatics Alumni Distinguished Professor.

A featured profile of Prof. Simoes can be found [here](#).

Prerequisites

Fundamentals in epidemiology and public health.

Course Description

The concept of population health provides a framework to assess health needs and demands, prioritize resources and select strategies to improve health of individuals and communities. The chosen strategies should increase quality of care while reducing cost, thus providing value to patients and providers.

The *purpose* of this course is to provide you with a better understanding of theories, concepts, and tools in four critical areas of managerial epidemiology:

- 1) Population health and its determinants;
- 2) Implications of Evidence Based Decision on health promotion and disease preventing and control;
- 3) Managing population health is managing population risk of diseases;
- 4) Achieving high quality, low cost and high value and in health care through population health management.

The *emphasis* of the course is on the use of managerial epidemiology in the health care field. The *focus* is on applying epidemiological analysis and management techniques to population and health care data, problems and issues necessary to make decisions to improve population and individual patient's health. This course should build upon previous knowledge of health and health care principles and strategies by applying them specifically to the management of population health.

Course objectives

1. To understand the epidemiological, demographical and statistical principles that are critical to population health, including population growth, social determinants of health, risk factors, causal association, measure of event occurrence in the population and its distribution.
2. To apply these principles to management of population health through health assessment, risk stratification and prioritization of actions for underlying, catchment and service populations.
3. To understand the principles of health systems strategies to successful management of population health.

The course should increase student's skills in:

1. Measurement of population growth
2. Measurements and indicators of risk, incidence density and prevalence
3. The analyses of trends and patterns in the occurrence of health events in the population
4. Risk stratification
5. Techniques of health prioritization

Required and optional readings

See elearning.