CoCo Seminar Series Spring 2015

System Dynamics Modeling as a Tool to Inform Health Policy

Dr. Nasim SabounchiSystems Science and Industrial Engineering Binghamton University

Wednesday February 4th, 2015 8:30-9:30am Engineering Building R-3 (SSIE Conference Room)



In this talk I introduce different systems science methodologies and more specifically system dynamics modeling. I discuss applications in modeling complex health issues including dealing with dynamics of health behaviors, health and human service delivery systems, energy balance, and cancer. System dynamics modeling focuses on understanding the relationship between the structure of a system and the resulting dynamic behaviors generated through multiple interacting feedback loops. Such an approach could be extremely valuable in studying dynamic problems arising in complex social, managerial, economic, or ecological systems such as the alarming increase in obesity trends in the United States. The model can be used in studying different health policy interventions and determining the proper policies and best values for critical parameters.

Dr. Nasim Sabounchi is an Assistant Professor in the Department of Systems Science and Industrial Engineering at Binghamton University. Her research interests include system dynamics modeling, systems engineering, quality, productivity and performance management.

For more information, contact Hiroki Sayama (sayama@binghamton.edu) http://coco.binghamton.edu/