

Course Description

Modeling for Energy Systems Analysis Fall 2019 ENV 716L.001

Nicholas School of the Environment

Duke University

Course Description

This course is an introduction to the use of computer models and the methods of optimization and simulation for students interested in the analysis of energy systems. The course makes emphasis in the formulation of optimization problems and simulation models, and in the identification of the available methods to solve them.

Our goal is to enable students to formulate, implement, and use their own quantitative model to puzzle out problems related to private and public decision making in the context of the U.S. energy system and the environment. The applications and case studies presented deal with problems of energy systems, their externalities, and the government policies that address them.