**Yıldız Technical University**

**Department of Economics**

**Mathematical Economics** (IKT 4630, Gr 1)

**Associate Professor Burak Ünveren**

**e-mail:** bunveren@yildiz.edu.tr

**Group 1:** Monday-Tuesday

**Problem Sessions:** TBA

**Class outline**

**Description:** The objective of this course is to instill the students with the basic methods, techniques, and models of mathematical economics. Using mathematical tools in economic analysis is widely considered to be standard. Therefore, literacy in formal analysis of economic models is a prerequisite in the field.

**Overview:** The course consists of solving and understanding related but different models in mathematical economics which analyze subjects such as voting, poverty, efficiency, taxation, etc. This approach is expected to help the students to grasp both the formal tools, and the economic mechanisms involved in our discussions.

**Grading:** Attendance is not obligatory. Class participation, however, will be graded. Participation announcements and all other course-related material will be available at <https://avesis.yildiz.edu.tr/bunveren>. Participation will be considered as a midterm exam. There will also be a final exam.

The grading process of the course is summarized below

* 1st Midterm 30%
* Final exam: 70%

**Prerequisites:** The necessary mathematical tools will be given during the course. Familiarity with basic microeconomic notions is a plus.

**Sources**

Hindriks J. and Myles G. D. 2013. Intermediate public economics. The MIT Press.

**Topics**

* Review of calculus
* Distribution and efficiency
* Competition and efficiency
* Happiness and greed
* Happiness and inequality
* Political Competition and distribution
* Incomplete information and statistics

**IMPORTANT:**

**Do not bring up your personal misfortunes, hardships, and problems regarding your planned graduation under any circumstance. For example, that you started working or that you need to pass this course in order to graduate or any family problem or misfortune must not be reflected to me. Do not expect any response to your emails.**