COURSE DETAIL

4.00

GAME THEORY Country Netherlands **Host Institution** Leiden University College Program(s) Leiden University College **UCEAP Course Level Upper Division UCEAP Subject Area(s) Economics UCEAP Course Number** 140 **UCEAP Course Suffix UCEAP Official Title GAME THEORY UCEAP Transcript Title GAME THEORY UCEAP Quarter Units** 6.00 **UCEAP Semester Units**

Course Description

Game theory is the field of mathematics that models interactions between two or more individuals and aims to predict their outcomes. Game theory is highly important in widely different fields, such as economics, politics, finance, sociology, and biology. In recent years game theory has provided significant insights in the dynamics of human-environment interactions, and it continues to deliver valuable contributions to this increasingly important field of study. The course addresses classical games such as the Hawk-Dove game, and the Prisoner's dilemma. These at first sight simple models lead to unexpected results, which greatly enhance insight in the behavior of humans as well as other species. Starting from these basic models, the course considers generalizations such as dynamical games, where the consequences of choices that are made change in time, and probabilistic games, where outcomes depend on chance. Participants should have a sufficient proficiency and interest in mathematics, and be prepared to amend their mathematics skills when necessary.

Language(s) of Instruction

English

Host Institution Course Number

Host Institution Course Title

GAME THEORY

Host Institution Campus

LUC The Hague- Level 2

Host Institution Faculty

Host Institution Degree

Host Institution Department

Governance, Economics and Development

Print