Modelling strategic behaviour

ECTS : 3

Enseignant responsable : Maria Luisa RATTO (https://dauphine.psl.eu/recherche/cvtheque/ratto-marisa)

Langue du cours : Français

Volume horaire : 18

Description du contenu de l'enseignement :

This is an introductory course to game theory applied to conflict management and resolution. It will provide analytical tools in decision making contexts characterised by conflicts. Strategic interactions will be considered in different settings, where agents may share the same information but can make either simultaneous choices or sequential decisions and also contexts where they have private information.

Planning / Course Schedule

Introduction to Strategic Reasoning

Simultaneous Games with Perfect information

Sequential Games with Perfect information

Games with Private Information

Compétences à acquérir :

The objective of the course is to provide analytical tools to structuring and modelling a decision problem in the practical management of conflicts and propose "rational" and "convincing" approaches to their resolution. Applications will consider conflictual settings.

Mode de contrôle des connaissances :

50%(midterm test result+participation evaluation)+50% final exam result.

Participation evaluation: overall attendance and participation in class and effort to solve exercises on a weekly basis. The mark for participation can vary from -2/20 to +2/20.

Coefficient : 3.00

Bibliographie, lectures recommandées :

Joseph, E. Harrington, "Games, Strategies and Decision Making", 2015, 2nd Edition, Worth Publishers