

Air Transport Economics

Course title	Air Transport Economics
Level / Semester	M2-S2
Credits (ECTS)	
Professor(s)	Christian Bontemps, Estelle Malavolti
Other teaching staff	
Teaching Hours CM	30h
Teaching Hours TD	
Teaching Hours TP	
Course Language	English
Language for TD and/or TP	

Presentation and organisation of the teaching staff:

Christian Bontemps (MF407), email: christian.bontemps@tse-fr.eu, Office hours to be determined. Preferred mean of interaction: meeting by appointment. Pr. Bontemps teaches the second part.

Estelle Malavolti (MF419), email: estelle.malavolti@tse-fr.eu, Office hours to be determined. Pr. Malavolti teaches the first part.

Objectives

After the course, the students should be able to:

- Describe the current challenges in air transport,
- Choose relevant models of industrial organization to analyze the sector,
- Comment on the assumptions behind the models and the results, using their knowledge of the markets,
- Present and critique relevant research papers.

Course description

After a presentation of the market and a strategic analysis of the sector, relevant models of Industrial Organization will be presented, based on research papers. Another part is devoted to the study of demand modeling and estimation in IO applied to the air transport industry.

The first part of the course is dedicated to the analysis of different IO models relevant for the sector. The main interest is to analyze the sector of the air transport and to propose relevant models to understand the main evolutions that could occur. For instance, we will work on how to answer to the question of modelling horizontal agreements such as code-sharing agreements between airlines. Another example is to know how models of cooperation could apply to the strategic interest for an airline of being partner in an alliance. The final objective of this part of the course is to be able to anticipate the evolution

of the competition and strategic interactions to a modification of the regulation and/or the intervention of a competition authority.

The second part of the course is devoted to the study of demand modeling in IO and entry models. Beyond academic careers, there are clear policy issues and commercial implications. In addition to the economics discipline, estimating demand, understanding product positioning, pricing and use of product information, merger analysis, reputation and the other topics that we cover are central concerns in the literatures on marketing, strategy and information systems. In this part, some particular attention is paid on the econometrics background and students should be able after these lectures to handle a complete empirical analysis on their favorite software.

The third part of the course consists into presentations by external professors and/or professionals, whose research or work is applied to economics of air transport.

The evaluation consists into a report on a project that includes an empirical part (45%) , performed in groups and a research question (1h30 exam, 45%). The last 10% come from the participation (mandatory).

This course is organized by faculty members from the French Civil Aviation University (Ecole Nationale de l'Aviation Civile).

Main References

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16. Caminal, R. and Claiçy, 2007, "Are loyalty-rewarding pricing schemes anti-competitive", *International Journal of Industrial Organization*, 25, 657-674.
17. Dana, J.D., 1999, "Using Yield Management to Shift Demand When the Peak Time is Unknown", *RAND Journal of Economics*, 30, 456-464.
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21. Nevo, A., 2000, "Mergers with Differentiated Products: the Case of the Ready-to-Eat Cereal Industry", *RAND Journal of Economics*, 31, 395-421.
22. Zhang A. and Y. Zhang, 2006, "Rivalry between strategic alliances", *International Journal of Industrial Organization*, 24, 287-301.