

Airport Operations II

Code: 101756
ECTS Credits: 6

Degree	Type	Year	Semester
2501233 Aeronautical Management	OB	2	1

Contact

Name: Liana Napalkova
Email: Liana.Napalkova@uab.cat

Use of Languages

Principal working language: english (eng)
Some groups entirely in English: No
Some groups entirely in Catalan: No
Some groups entirely in Spanish: No

Teachers

Mercedes Elizabeth Narciso Farias

Prerequisites

Students are expected to have the following background:

- Completion of the course "Airport Operations I" (101757).
- Basic knowledge of English language, at a level sufficient to understand theoretical material, assignments and exams of the course. However, it should be noticed that both exams and written assignments can be submitted in any of three languages: English, Catalan or Spanish.

Objectives and Contextualisation

This course discusses the management, administration, financing and operating of airports.

Upon the course completion, students will be able to:

1. Identify, compare and evaluate the various airport types, categories, operational systems, areas, functions, and agents roles.
2. Explain the evolution of various organizational designs and managerial functions at airports.
3. Identify the major streams of airport revenue and expenses, budget types, leases, rates, and pricing strategies.
4. Understand the strategic, tactical and operational planning activities at airports.
5. Recognize and explain the economic importance and related impacts of airports on the community and transportation infrastructure.
6. Explain the concept of A-CDM.
7. Explain the ground handling planning and scheduling.

Competences

- Communication.

- Identify, develop and maintain the necessary resources to meet the tactical and operative needs inherent to air transport activities.
- Personal attitude.
- Personal work habits.
- Thinking skills.
- Use knowledge of the fundamental principles of mathematics, economics, information technologies and psychology of organisations and work to understand, develop and evaluate the management processes of the different systems in the aeronautical sector.

Learning Outcomes

1. Communicate knowledge and findings efficiently, both orally and in writing, both in professional situations and with a non-expert audience.
2. Critically assess the work done.
3. Describe the aeronautical environment in the field of airport operations.
4. Describe the operations in the terminal area (TMA).
5. Develop critical thought and reasoning.
6. Develop curiosity and creativity.
7. Develop independent learning strategies.
8. Develop the ability to analyse, synthesise and plan ahead.
9. Identify the infrastructure maintenance operations and their impact on quality of service.
10. Identify the logistical resources necessary in an airport for the management of landside operations for aircraft turnaround.
11. Identify the technological resources necessary for the airside management of operations in the terminal area.
12. Maintain a proactive and dynamic attitude towards career progression, personal growth and continuous professional development. Have the will to succeed.
13. Make efficient use of ICT in communicating ideas and results.
14. Manage time and available resources. Work in an organised manner.
15. Use English as the primary language of professional communication.
16. Work independently.

Content

Online Resources used for the communication between course staff and students

- Campus Virtual: <http://cv.uab.cat>

Building Blocks of a Course

The course consists of the following building blocks:

- Lectures (theoretical sessions)
- Practical sessions - each session takes 2 hours and 30 minutes per group
- Seminars - each seminar takes 1 hour per group
- 1 midterm exam (test) - the duration is 2 hours and 30 minutes
- 1 final exam (test) - the duration is 2 hours and 30 minutes
- Resubmissions

Contents

- PART I: AIRPORT OPERATIONS MANAGEMENT
- PART II: GROUND HANDLING PLANNING AND SCHEDULING
- PART III: AIRPORT CAPACITY MANAGEMENT
- PART IV: AIRPORT COLLABORATIVE DECISION MAKING
- PART V: THE FUTURE AIRPORTS

Methodology

The main contents of this course will be introduced in regular lectures. The course also includes (1) problem sessions that are focused on the application of specific methods to realistic problem solving, and (2) seminars where students will be encouraged to deeply analyze particular topics of the course.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Problem sessions	15	0.6	2, 1, 3, 8, 5, 13, 14, 10, 11, 12, 16, 15
Regular lectures	25	1	3, 4, 5, 10, 11, 9, 15
Seminars	10	0.4	1, 3, 4, 7, 8, 6, 14, 10, 11, 9, 15
Type: Autonomous			
Assignments	100	4	2, 3, 4, 7, 8, 5, 14, 10, 11, 9, 16, 15

Assessment

The final grade will be estimated based on four graded works according to the following formula:

$$\text{Final grade} = 0.20 * \text{The average grade for practical sessions} + 0.10 * \text{The average grade for seminars} + 0.25 * \text{Midterm_exam} + 0.45 * \text{Final_exam}$$

It is mandatory to visit at least 40% of theoretical lectures.

The student is considered as "Not evaluable" if any of the following requirements is not met:

- Attendance of 40% of lectures
- Participation in all 3 practical sessions, neither participated in their resubmissions.
- Participation in both mid-term and final exams (including their resubmissions).

Honors (Matricules d'Honor)

Honors are awarded on the basis of the completed body of the student's work. In particular, honors are only awarded to the students who obtained at least 9.00 for all activities of the course (seminars, practical sessions and exams).

Students who repeat the course

Students who fall into this category will need to resubmit practical sessions, mid-term and final exams. The final grade of such students will be estimated as follows:

$$\text{Final grade} = 0.20 * \text{The average grade for practical sessions} + 0.35 * \text{Midterm_exam} + 0.45 * \text{Final_exam}$$

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Class and Seminars Participation (discussions, assignments, attendance, attention in class, questions raised, etc.)	10%	0	0	1, 3, 4, 7, 8, 6, 14, 10,

				11, 9, 15
Final examination	45%	0	0	3, 4, 10, 11, 9, 16
Mid-term examination	25%	0	0	3, 4, 10, 11, 9, 16
Problem sessions (3 sessions)	20%	0	0	2, 1, 3, 8, 6, 5, 13, 14, 10, 11, 12, 15

Bibliography

The course materials will be uploaded periodically to the Campus Virtual. The following books are recommended as optional reading:

- Neufville, R. and Odoni, A. Airport Systems. Planning, Design, and Management. 2nd Edition. 2013.
- Vasigh, B., Fleming, K. Introduction to Air Transport Economics: From Theory to Applications. 2nd Edition. 2013.
- Francisco Salazar De La Cruz. INDUSTRIA AEROPORTUARIA. Editorial Círculo Rojo, 2013.