

Air Cargo Operations

Code: 101737
ECTS Credits: 6

2025/2026

Degree	Type	Year
Aeronautical Management	OT	4

Contact

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Teachers

Juan Aijon Lopez

Teaching groups languages

You can view this information at the [end](#) of this document.

Prerequisites

Recommendable for the student to have knowledge of Marketing, Management Analysis, Macroeconomics and Microeconomics.

Objectives and Contextualisation

Unveiling the future aeronautical managers the basic concepts of Air Freight, an activity not too considered by its small volume, but relevant to the value of the goods transported and essential for the logistics developed in a globalized world. In addition, the management of cargo air transportation is addressed from the vision of the airline and of the rest of AirSupply Chain stakeholders, encouraging students to investigate and discuss both the current and the new developments and projects in this rapidly evolving means of transport.

Competences

- Allocate and manage aircraft turnaround resources efficiently.
- Communication.
- Personal attitude.
- Personal work habits.
- Supervise the management of resources in an airport.
- Thinking skills.

Learning Outcomes

1. Communicate knowledge and findings efficiently, both orally and in writing, both in professional situations and with a non-expert audience.
2. Develop critical thought and reasoning.
3. Develop curiosity and creativity.
4. Develop the ability to analyse, synthesise and plan ahead.
5. Generate innovative and competitive proposals in professional practice.
6. Improve performance indices in aircraft turnaround operations.
7. Make efficient use of ICT in communicating ideas and results.
8. Manage information, critically appraising innovations in the field, and analyse future trends.
9. Manage time and available resources. Work in an organised manner.
10. Prioritise operations in accordance with accumulated delays and available resources.
11. Work independently.

Content

INTRODUCTION TO AIR CARGO TRANSPORTATION

- Air Cargo: concept and evolution.
- Goods transported by air
- Regulatory framework

STRUCTURE OF THE AIR CARGO

- Main and complementary actors
- Authorities and regulatory bodies
- Necessary infrastructures

MANAGEMENT AND LOGISTICS OF THE AIR CARGO

- Essential means: Aircraft, cargo units and air trucks
- Commercialization of cargo air transport
- Documentary and physical handling: export and import

CHANGING ENVIRONMENT OF THE AIR CARGO

- The Security challenge
- Quality certification
- Sustainability in Air Cargo
- Co-modality of the Air Transport

OTHER TOPICS OF DISCUSSION

- Rates, loyalty systems, electronic documentation, revenue management systems, specialized airports, differentiated products, temperature control, AI.

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Master class	27	1.08	4, 2, 6, 10

Problem solving seminars	15	0.6	4, 3, 2, 8, 6, 10
Simulation and Cases	8	0.32	4, 5, 9, 8, 6, 10
Type: Supervised			
Tutorship	2	0.08	8
Type: Autonomous			
Personal study and Preparation of case studies	94	3.76	1, 4, 7, 5, 9, 8, 6, 10

Classes will combine lecture sessions with a large group led by the teacher and promoting the intervention of students with other interactive and extra-classroom activities that allow work in small and large groups through cooperative learning, research and communication techniques.

Specifically, the activities consist of:

- Master classes: introduction to the terminology and main aspects of the Air Cargo. Daily active participation is evaluated in class.
- Problem seminars: problem-solving to be resolved in a group or individually.
- Practical simulations: simulation of commercial and operational operations, to be done in group.
- Practical projects: an exposition of controversial subjects in the world of cargo so that the student investigates, exposes and opens in collaboration with other students. The subjects are raised in mid-November (approximately) and must be presented in group in the course of 4 classes (approximately).

Communication with the students will be via Virtual Campus and occasionally e-mail.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Air Supply Chain related topic presentation	40%	1	0.04	1, 4, 3, 2, 7, 5, 9, 8, 6, 10, 11
Exam	50%	3	0.12	1, 4, 2, 7, 9, 8, 6, 10, 11
Participation in classes, practices, seminars and simulations	10%	0	0	1, 4, 3, 2, 5, 9, 8

The single assessment system is not foreseen in this subject.

A continuous evaluation will be carried out with a formative purpose that should allow us to follow the learning process of the student in order to be able to guide and orient them. On the other hand, it must allow us to make decisions about the pace of development of the subject.

A summary evaluation will also be made to verify the level of learning achieved by reference to the competencies and objectives set.

Evidence will be the completion of the following activities:

- Completion of a presentation in small groups consisting of a research work, its presentation and subsequent debate in which the task of obtaining information, the quality of the content and presentation and mastery of the topic in question will be assessed (40%).
- Carrying out an exam that allows evaluating individual work as well as interest and knowledge in this part of the subject (50%).
- Participation in classes, practices, seminars and simulations. Evaluable practices scheduled in advance will be carried out (10%).
- Completing the presentation and the exam will be essential to pass the subject. In order to pass the subject, through continuous evaluation, it will be necessary to obtain a minimum grade of 5 in the calculation of the aforementioned activities.

Recoverable Activities: In the event that either of the two essential activities are not passed, it can be recovered on the dates set by the Coordination:

- If the presentation has not been satisfactory, it may be repeated in the aspects that need to be corrected, improved or added.
- The exam is made up of a theoretical part and a practical part. To pass the exam, it is required to obtain in both parts a minimum of 50% of the maximum qualification established for each part. Therefore, It is required that the sum of the qualifications of both parts reaches at least 50% of the maximum qualification established. If it is less than 50%, the exam may be repeated in its entirety or in the part that has not been passed.

The student can take the recovery of the recoverable activities whenever it has been presented to a set of activities that represent a minimum of two-thirds of the total grade of the subject.

A student will be considered non-evaluable (NA) if he or she does not attend any of the essential activities.

If a student is a repeater, they must be presented to all the subject assessment activities.

Honours degree (MH). Awarding a grade of honors is the decision of the teaching staff responsible for the subject. UAB regulations indicate that the MH may only be granted to students who have obtained a final grade of 9.00 or more. Up to 5% of the total enrolled students can be awarded with an MH.

Without prejudice to other disciplinary measures that are deemed appropriate, irregularities committed by the student that may lead to a variation in the grade of an evaluation act will be graded with a zero. Therefore, cheating, plagiarism, letting others cheat, etc. in any of the evaluation activities it will imply failing with a zero.

Bibliography

Álvarez Robles, Óscar . EL TRANSPORTE DE CARGA AEREA EN ESPAÑA: CONDICIONANTES Y PERSPECTIVAS. Ministerio de Fomento. Centro de Publicaciones, 2008

Arán Iglesia, Javier. DESCUBRIR LA CARGA AÉREA. Centro de Documentación y Publicaciones de Aena, 2003

Pareja Albornoz, Joaquín. EL CONOCIMIENTO AÉREO Y OTROS DOCUMENTOS RELACIONADOS CON EL TRANSPORTE DE MERCANCÍAS POR VÍA AÉREA. IBERIA, 1986

Vila, Carlos. LOGÍSTICA DE LA CARGA AÉREA : MANUAL DE LOS PROCESOS LOGÍSTICOS DEL TRANSPORTE AÉREO DE MERCANCÍAS. Logisbook, 2004

Soriano, Bárbara y Pinto, César. FINANZAS PARA NO FINANCIEROS.IEB. Instituto de Estudios Bursátiles.FC Editoria.2008

Webs from Boeing, Airbus, air cargo organizations, major airports, and technical and specialized magazines of the Industry.

Software

Microsoft Office applications

Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
(PAUL) Classroom practices	1	Catalan	first semester	afternoon
(SEM) Seminars	11	Catalan	first semester	afternoon
(SEM) Seminars	12	Catalan	first semester	afternoon
(TE) Theory	1	Catalan	first semester	afternoon