

Guía docente de la asignatura	Operaciones aeroportuarias II
Curso	2014-2015
Código	101756
Créditos ECTS	6
Titulación	2501233 Gestión aeronáutica
Plan	829 Graduado en Gestión Aeronáutica
Tipo	OB
Curso	2
Semestre	1
Contacto	Liana Napalkova
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Lengua vehicular mayoritaria	Inglés (eng)
Algún grupo íntegro en inglés	Si
Algún grupo íntegro en catalán	No
Algún grupo íntegro en español	No

Prerequisitos

It is advisable to have successfully completed the previous course on Airport Management (101757 - Operacions Aeroportuàries I)

Objetivos y contextualización

Upon course completion, students will be able to:

1. Discuss the importance of legislative acts affecting Airport Management.
2. Identify, compare and evaluate the various airport types, categories, operational systems, areas, functions, and roles.
3. Explain the evolution of various organizational designs and managerial functions at airports; identify the major areas of managerial attributes, responsibility and expertise; discuss the issues of power and authority as they relate to federal, state, and local airport issues.
4. Identify the major streams of airport revenue and expenses, budget types, leases, rates, and pricing strategies.
5. Identify the major sources of environmental issues faced by airports, especially the zones of noise and abatement procedures, and the applicable regulatory guidelines.
6. Recognize the various factors affecting the issue of public acceptance as it relates to airports and the aviation community; recite significant programs of public relations, marketing and political actions available to airports.
7. Describe the scope and significance of airport maintenance to include major categories, costs, design considerations, environmental concerns, and techniques for dealing with repairs.
8. Recognize and explain the economic importance and related impacts of airports on the community and transportation infrastructure; explain airport capacity potential and apply statistical measures to traffic demand forecasts.
9. Explain the airport master planning process to include its major elements, tasks, forecasting techniques, and development responsibilities.

Competencias

Gestión aeronáutica

- Actitud personal
- Comunicación
- Disponer de los fundamentos de matemáticas, economía, tecnologías de la información y psicología de las organizaciones y del trabajo necesarias para comprender, desarrollar y evaluar los procesos de gestión de los distintos sistemas presentes en el sector aeronáutico.
- Hábitos de pensamiento
- Hábitos de trabajo personal

- Identificar, desarrollar o adquirir, y mantener los recursos necesarios para dar respuesta a las necesidades tácticas y operativas inherentes a las actividades del transporte aéreo.

Resultados de aprendizaje

1. Evaluar de forma crítica el trabajo realizado.
2. Comunicar eficientemente de forma oral y/o escrita conocimientos, resultados y habilidades, tanto en entornos profesionales como ante públicos no expertos.
3. Describir el entorno aeronáutico en el ámbito de las operaciones aeropuarias.
4. Describir las operaciones en el área de control de terminal (TMA)
5. Desarrollar estrategias de aprendizaje autónomo.
6. Desarrollar la capacidad de análisis, síntesis y prospectiva.
7. Desarrollar la curiosidad y la creatividad.
8. Desarrollar un pensamiento y un razonamiento crítico.
9. Hacer un uso eficiente de las TIC en la comunicación y la transmisión de ideas y resultados.
10. Gestionar el tiempo y los recursos disponibles. Trabajar de manera organizada.
11. Identificar los recursos logísticos necesarios en un aeropuerto para la gestión de las operaciones lado tierra para atender la escala de las aeronaves.
12. Identificar los recursos tecnológicos necesarios para la gestión lado aire de las operaciones en área de control de terminal.
13. Identificar las operaciones de mantenimiento de la infraestructura así como la repercusión que tienen en la calidad del servicio.
14. Identificar las operaciones que cabe coordinar en el tiempo de escala de las aeronaves.
15. Mantener una actividad proactiva y dinámica respecto al desarrollo de la propia carrera profesional, el crecimiento personal y la formación continua. Tener espíritu de superación.
16. Trabajar de manera autónoma.

Contenidos

The focus of this course will be an examination of the management of airports. Emphasis is on the facilities that comprise an airport system, including airspace, airfield, terminal, and ground access operations.

Airport Operations Management is designed to provide the student with an understanding of the role of the airport manager in the management, administration, financing and operating of small, medium, large, hub airport.

An understanding of the operation and management of airports plays an important role in rounding out the aviation elective course offerings to students in any of the aviation degree programs. Whether such students are interested in airport management as a career field or another segment of aviation such as the airlines, general aviation or government, how the airport interfaces with these segments is an integral part of his/her overall education. Therefore, its contribution is largely synergistic, but it also provides an opportunity to acquire an in-depth analysis of the phases of airport management; specifically, master planning or the physical facility planning, economics of master planning or the physical facility planning, economics of airport operation and organizational structure. The duties and responsibilities of the airport management team will be analyzed.

The course is designed for the student interested in airport management as a career field or others who can benefit from an in-depth exposure to airport management.

CONTENTS

PART I:

PART I: AIRPORT OPERATIONS MANAGEMENT

- Introduction to Airport Operations
- Airport Operations Specific Features

- Ground Handling Management
- Gate Assignment and Check-In Counter Assignment
- Landing and Arrival Methods
- Take off and Departure Methods
- Security and Screening Management
- Peaks and Airline Rescheduling

PART II: GROUND HANDLING PLANNING AND SCHEDULING

- Ground Handling Overview: Passenger Services, Ramp Services, Load Control, Communications and Flight Operations, Cargo and Mail Warehouse Services, Support Services, Security, Aircraft Maintenance
- IATA Standard Service Level Agreement
- Tactical Planning
- Objectives
- Workload Planning
- Staff Rostering
- Operational Planning
- Objectives
- Ground Handling Operations Scheduling
- Flight Delays Management
- Safety and Security Management
- Safety Challenges in Passenger Handling, Baggage Handling, Cargo/Mail Handling and Aircraft Handling Procedures
- Risk Management
- Safety Improvement Initiatives
- Legislators and Executive Institutions
- Safe Ground Handling Methodology
- Environment Friendly Ground Handling

PART III: AIRPORT CAPACITY MANAGEMENT

- Airport Landside Capacity
- Airport Airside Capacity
- Methods for Measuring Airport Landside Capacity
- Airport Demand
- Methods for Analyzing and Forecasting the Airport Passenger Demand
- An Application of the Econometric Methods
- Matching the Airport Capacity to Demand in the Short-Term
- The Airport Master Plan

PART IV: AIRPORT COLLABORATIVE DECISION MAKING

- Objectives
- Milestones Approach
- System Wide Information Management (SWIM)
- Real Cases

PART V: AIRLINE BUSINESS MANAGEMENT

- Airline Business Models
- Airline Business Plan
- Target Market
- Competitive Analysis
- Service offering
- Marketing and Distribution Plan
- Operations Plan
- Financials

- Implementation schedule
- Airline Financial Analysis
- Airline Business Games

PART VI: THE FUTURE AIRPORTS

- The Airport as Multimodal Transport Node
- Design and Operations of the Future Airports
- Green Airports
- Airports as a part of Smart Cities

Metodología

The main contents of this course are to be introduced in regular lectures. The course includes problem sessions that are focused on application of specific methods to realistic problem solving. Students are also encouraged to analyze some real scenarios that will be debated during the scheduled seminars.

Actividades formativas

Actividad	Horas	ECTS	Resultados de aprendizaje
Tipo: dirigidas			
Problem sessions	15	0,6	
Regular lectures	30	1,2	
Seminars	5	0,2	
Visitas programadas	5	0,2	
Tipo: autónomas			
Assignments	100	4	

Evaluación

The evaluation of this course is to be done based on two examinations: mid-term and final. In addition, proactivity and participation in classes and seminars will be considered.

Three regular problem/assignment sessions are scheduled on the course, summing up 30 % of the final mark.

Actividades de evaluación

Actividad	Peso	Horas	ECTS	Resultados de aprendizaje
Class and Seminars Participation (discussions, assignments, attendance, attention in class, questions raised, etc.)	10%	0	0	2, 7, 8, 14, 11, 16
Final examination	40%	0	0	3, 4, 11, 12, 13
Mid-term Examination	20%	0	0	3, 4, 11, 12, 13
Problem 1	10%	0	0	1, 2, 5, 6, 7, 8, 9, 10, 14, 15, 16
Problem 2	10%	0	0	1, 2, 5, 6, 7, 8, 9, 10, 14, 15, 16
Problem 1	10%	0	0	1, 2, 5, 6, 7, 8, 9, 10, 14, 15, 16

Bibliografía

Wells & Young, AIRPORT PLANNING AND MANAGEMENT, 5th ed., Irwin-McGraw Hill, 2004.

Francisco Salazar De La Cruz. INDUSTRIA AEROPORTUARIA. Editorial Círculo Rojo, 2013.