**COURSE DESCRIPTION:**

The course is a study of economic applications to the aviation industry. Students will examine the evolution of market forces in the industry with particular emphasis on airlines, airports. Concepts of yield management, air passenger demand forecasting, price and cost study, airport economics, air and land space optimization strategies, government's role in aviation, international implications of competition and government regulation, economic analysis of safety, and other relevant industry issues are examined. Emphasis is placed on an increasingly international air transportation environment.

**PROGRAM OBJECTIVES:**

1. **Strong Foundation in Aviation Operations:** Provide students with essential theoretical knowledge and practical skills in airport and airline management, preparing them for key roles in the aviation industry.
2. **Global Competence:** Develop a global perspective in students, empowering them to adapt and succeed in international aviation markets.
3. **Leadership and Management Skills:** Prepare students for entry-level supervisory and managerial positions, focusing on decision-making and leadership abilities.
4. **Aviation Policy and Decision-Making:** Equip students with a comprehensive understanding of aviation laws, regulations, and policies, empowering them to make informed decisions and manage the legal and regulatory aspects of the industry effectively.
5. **Expertise in Aviation Information Systems:** Provide students with in-depth knowledge and skills in aviation information systems, focusing on the integration of technology and data management.
6. **Safety Management & Environmental Sustainability:** Highlight the importance of safety in aviation by providing students with the skills to manage safety protocols and instilling an understanding of environmental sustainability principles to promote sustainable practices.
7. **Adapting to Emerging Aviation Technologies:** Prepare students to understand and integrate future aviation technologies and information systems, ensuring they are equipped to lead in a rapidly evolving industry.

**PROGRAM LEARNING OUTCOMES**

1. **Aviation Operations Proficiency**: Graduates will demonstrate essential theoretical knowledge and practical skills in airport and airline management, enabling them to effectively perform key roles within the aviation industry.
2. **Global Perspective**: Graduates will possess a local and global understanding of aviation markets, allowing them to adapt and thrive in local diverse international environments.
3. **Leadership and Management Competence**: Graduates will exhibit strong decision-making and leadership skills, preparing them for entry-level supervisory and managerial positions in aviation.
4. **Regulatory Knowledge**: Graduates will have a comprehensive understanding of aviation laws, regulations, and policies, empowering them to make informed decisions regarding the legal and regulatory aspects of the industry.
5. **Information Systems Expertise**: Graduates will be equipped with advanced knowledge and skills in aviation information systems, focusing on technology integration and data management to enhance operational efficiency.
6. **Safety and Sustainability Awareness**: Graduates will recognize the critical importance of safety in aviation and will be able to manage safety protocols while promoting environmental sustainability practices within the industry.
7. **Technological Adaptability**: Graduates will be prepared to understand and integrate emerging aviation technologies, ensuring they can lead and innovate in a rapidly evolving industry landscape.
8. Students can recommend ideas for the implementation of new generation technology for safe and improved output.
9. Students would reach a level of understanding of General / Business / Cargo / Charter aviation that will add value to their respective organizations.
10. **:** Students would-be contributors to a safe and effective aviation ramp environment.
11. Students would be aware of new technology and new aviation systems to adopt.

**COURSE LEARNING OBJECTIVES**

**CLO 1**: Acquire an understanding of advance aviation economics concepts.

**CLO 2**: Deregulation act of 1978 and its Economic Impact on airline Industry.

**CLO 3**: To learn about The Economics of Aviation Safety & Security and its effects.

**CLO 4**: To Understand Value of Airline Marketing—the Role of Passenger Demand on revenue.

**CLO 5**: To learn about The Structure of Airline Costs.

**CLO 6**: To understand about Determinants of Airline Costs.

**CLO 7**: To learn decision-making and value proposition analysis in airline economics.

**GENERAL PEDAGOGY OF CLASS CONDUCT:**

1. Before class self-study
2. In-class discussion and quizzes
3. Case analysis/assignments for developing analytical skills, problem-solving and decision making
4. Application of confidence-building measures through classroom exercises (presentations etc.)

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| --- | --- | --- | --- | --- |
| Week | Topic | CLOs | PLOs | **Faculty Remarks achieving CLOs & PLOs** |
| Week 1 | * The Economics of Aviation industry. * Characteristics and Trends in Airline Operations | CLO 1 | PLO 1 PLO 2 |  |
| Week 2 | * The Economic Regulation of International Air Transportation | CLO 1CLO 2 | PLO 2 PLO 3 |  |
| Week 3 | * Deregulation and its Economic Impact on airline Industry | CLO 3 | PLO 4 PLO 5 |  |
| Week 4 | * Liberalization in Europe – impact of Liberalization on Economy structure | CLO 3 | PLO 3 PLO 4 |  |
| Week 5 | * The Structure of Airline Costs | CLO 2CLO 3 | PLO 5 PLO 3 |  |
| Week 6 | * Determinants of Airline Costs | CLO 2 | PLO 4 PLO 5 |  |
| Week 7 | * The Economics of Passenger Charters | CLO 3CLO 7 | PLO 1 PLO 2 |  |
| Week 8 | * Airline Marketing—The Role of Passenger Demand | CLO 6 | PLO 3 PLO 5 |  |
| Week 9 | Mid Term Paper | - | - | - |
| Week 10 | * Forecasting Demands in aviation industry | CLO 3CLO 4 | PLO 5 PLO 9 |  |
| Week 11 | * Aviation Regression Analysis * Game Theory and its application in Economic Decisions in the Aviation Industry | CLO 5 | PLO 10 PLO 9 |  |
| Week 12 | * Pricing Policies and Fare Structures * The Economics of Air Freight | CLO 6 | PLO 7 PLO 10 |  |
| Week 13 | * The Economics of Aviation Safety & Security * Future Problem solving approaches | CLO 7 | PLO 7 PLO 10 |  |
| Week 14 | Project Presentations&Research Based Case | CLO 1 | PLO 9 PLO 10 |  |
| Week 15 | * Class Revisions Discussions * Guest Speaker Session | CLO 1 | PLO 1 PLO 2PLO 3 |  |

**SUBMISSION REQUIREMENTS**

* Students should form class group, which is consist of 3 to 5 Individuals
* All groups choose a relevant topic upon guideline of the faculty.
* All groups MUST submit their project before 13Th week.
* All groups must prepare PPT Slides for final presentation and faculty will evaluate presentation and reports.

**PROJECT GUIDELINES**

* Use required format; report should be not less than 15 pages.
* Important areas of project i.e. definitions, safety regulations, audit procedures, audit checklists and safety training guidelines for employees in fictional organization.
* All groups should be well prepared to present their ideas.

**RECOMMENDED LITERATURE:**

1. Flying off course- The economics of International Airlines by Rigas Doganis
2. [Air Transport Economics: Theory to Applications](http://www.amazon.com/Introduction-Air-Transport-Economics-Applications/dp/1409454878/ref%3Dsr_1_1?s=books&amp;ie=UTF8&amp;qid=1441949591&amp;sr=1-1&amp;keywords=aviation%2Beconomics) by [Bijan Vasigh](http://www.amazon.com/Bijan-Vasigh/e/B001J8ZJGM/ref%3Dsr_ntt_srch_lnk_1?qid=1441949591&amp;sr=1-1) and Ken Fleming, Ashgate, 2013
3. Air Transport Liberalization and Its Impacts on Airline Competition and Air Passenger Traffic by Tae Oun, Anming Zang, University of Columbia, Vancouver.