GAU, School of Aviation, Aviation Management

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| **Course Unit Title** | | Air Transportation | |
| **Course Unit Code** | | AVM202 | |
| **Type of Course Unit** | | Compulsory, Aviation Management | |
| **Level of Course Unit** | | 2nd Year BSc | |
| **National Credits** | | 3 | |
| **Number of ECTS Credits Allocated** | | 6 ECTS | |
| **Theoretical (hour/week)** | | 3 | |
| **Practice (hour/week)** | | - | |
| **Laboratory (hour/week)** | | - | |
| **Year of Study** | | 2 | |
| **Semester when the course unit is delivered** | | 4 | |
| **Course Coordinator** | |  | |
| **Name of Lecturer (s)** | |  | |
| **Name of Assistant (s)** | |  | |
| **Mode of Delivery** | | Face to Face | |
| **Language of Instruction** | | English | |
| **Prerequisites and co-requisites** | |  | |
| **Recommended Optional Program Components** | | Basic background of Fundamentals of Aviation | |
| **Objectives of the Course:** | | | |
| * Teaching the basic concepts of Air transportation. * Teaching the main developments and challenges in Air transportation. * Teaching basic knowledge of payload calculation and NPV. | | | |
| **Course Description** | | | |
| This course covers the history, management and future trends in air transportation. It covers the four principal segments of air transportation: major carriers, regional carriers, all-cargo carriers and general aviation. In each segment, the issues of aircraft design, market share, finance, insurance and operations are discussed. The course analyses the development and application of national and international regulations that impact air transportation. Topics include: cost structure, air fares, flight crews and safety, environmental impacts of aircraft and airports, operating and service characteristics, technological advances, world competition and intermodal operations. | | | |
| **Course Contents** | | | |
| Week |  | | Exams |
| 1 | Introduction to Air Transportation (Overview of Aviation industries and regulation bodies) | |  |
| 2 | Airline Management and Organization | |  |
| 3 | Introduction to Air transportation laws, regulations and associations | |  |
| 4 | Introduction to Airline concepts | |  |
| 5 | Economic Characteristics of the Airlines | |  |
| 6 | Payload Calculation | |  |
| 7 | Payload Calculation Exercises, Tutorials and Revision Class | |  |
| 8 | Midterm Exam | | Midterm |
| 9 | Airline Financing | |  |
| 10 | Air Cargo Concepts and Challenges | |  |
| 11 | Impact of Air Transportation: Climate change, environment and etc. Green Aviation | |  |
| 12 | Airline Network Design and Introduction to Airline scheduling and Fleet Planning | |  |
| 13 | NPV (Net Present Value) Calculation | |  |
| 14 | NPV Calculation Exercise and Tutorial Class | |  |
| 15 | Final Exam | | Final |
| **Recommended Sources** | | | |
| **Textbook:** John G. Wensveen, “Air Transportation: A Management Perspective”, 7th edition, Ashgate Publishing, 2011.  **Supplementary Material(s):** Robert M. Kane, “Air Transportation”, 16th edition, Kendall/Hunt Publishing Company, 2003. | | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Assessment** | | | | | | | Attendance | 5% |  |  |  |  | | Assignments | 10% |  |  |  |  | | Project-Seminar | 10% |  |  |  |  | | Midterm Exam | 25% | Written |  |  |  | | Quizzes | 10% |  |  |  |  | | Final Exam | 40% | Written |  |  |  | | Total | 100% |  |  |  |  | | **ECTS Allocated Based on the Student Workload** | | | | | | | Activities | | | Number | Duration (hour) | Total Workload(hour) | | Hours per week (Theoretical) | | | 15 | 3 | 45 | | Presenting of observations and tutorials as report | | | 5 | 7 | 35 | | Preparation of the homework | | | 5 | 7 | 35 | | Quizzes | | | 2 | 11 | 22 | | Supervision | | | 1 | 17 | 17 | | Final Exam | | | 1 | 22 | 22 | | Total Workload | | | | | 176 | | Total Workload/30 (h) | | | | | 5.9 | | ECTS Credit of the Course | | | | | 6 | | | | |