GAU, School of Aviation, Aviation Management

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| **Course Unit Title** | Contemporary Aviation Issues |
| **Course Unit Code** | AVM404 |
| **Type of Course Unit** | Compulsory, Aviation Management |
| **Level of Course Unit** | 4th Year BSc |
| **National Credits** | 3 |
| **Number of ECTS Credits Allocated** | 5 ECTS |
| **Theoretical (hour/week)** | 3 |
| **Practice (hour/week)** | - |
| **Laboratory (hour/week)** | - |
| **Year of Study** | 4 |
| **Semester when the course unit is delivered** | 8 |
| **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 Aviation Issues |
| **Objectives of the Course:**   * Describe some of the key factors and manpower issues in the airline industry. * Discuss the application of developing technology to aspects of the aviation sector. * Discuss some ethical issues surrounding the industry.   Explain the different roles and responsibilities of staff in the airline industry. | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **Course Description** | | | | | | | | | The aim of this course is to help students develop an applicable understanding of current contemporary issues in aviation, and their importance in aviation sector. The course provides students to examine of contemporary issues in the worldwide aviation industry such as administration, training programs, automation and equipment development. | | | | | | | | | **Course Contents** | | | | | | | | | Week |  | | | | | | Exams | | 1 | Intro to Cont. Aviation Issues/Key stakeholders and ATC | | | | | |  | | 2 | SMS Systems/Aviation Security post 9/11/ Human Factors in Aviation Safety | | | | | |  | | 3 | Environmental Challenges in Aviation (Carbon Emissions, Climate Change/SAFs, Noise Pollution and Mitigations Strategies) | | | | | |  | | 4 | Technological Advancements in Aviation (The role of AI and Automation in Aviation/UAV and Drones, NextGen ATMS) | | | | | |  | | 5 | Regulatory and legal issues (international aviation las and treaties/ICAO, FAA, EASA/ Emerging legal challenges) | | | | | |  | | 6 | Economic and Financial Issues in Aviation (Airline economics and business model, impact of global economic conditions in Aviation) | | | | | |  | | 7 | Globalization and the aviation industry (The role of aviation and global trade, The impact of geopolitical issues on aviation) | | | | | |  | | 8 | Midterm Exam | | | | | | Midterm | | 9 | Airline management and operation (Fleet management and optimization, Operaterational challenges in airlines) | | | | | |  | | 10 | Airport management and development | | | | | |  | | 11 | Crisis management in aviation, handling natural disasters and pandemics, public relations and communications during crisis | | | | | |  | | 12 | Innovation and the future of aviation, Supersonic and hypersonic flights, the future of space tourism and commercial space flights | | | | | |  | | 13 | Ethical and social issues in aviation, impact of aviation on local communities | | | | | |  | | 14 | Revision, Exercises and Tutorial Class | | | | | |  | | 15 | Final Exam | | | | | | Final | | **Recommended Sources** | | | | | | | | | **Textbook:** Ashford, N. J. (1997). Airport operations. New York: Mcgraw-Hill.  **Supplementary Material(s):**  De Neufville, (2002). Airport sytems: planning, design and management. New York: Higher Education. | | | | | | | | | **Assessment** | | | | | | | | | Attendance | | 5% |  |  |  |  |  | | Assignments | | 5% |  |  |  |  |  | | Project-Seminar | | 10% |  |  |  |  |  | | Midterm Exam | | 25% | Written |  |  |  |  | | Quizzes | | 5% |  |  |  |  |  | | Final Exam | | 50% | 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 | 5 | 25 | | | Preparation of the homework | | | | 5 | 5 | 25 | | | Quizzes | | | | 2 | 11 | 22 | | | Supervision | | | | 1 | 17 | 17 | | | Final Exam | | | | 1 | 22 | 22 | | | Total Workload | | | | | | 156 | | | Total Workload/30 (h) | | | | | | 5.2 | | | ECTS Credit of the Course | | | | | | 5 | | | |