**GAU, School of Aviation, Aviation Management**

|  |  |
| --- | --- |
| **Course Unit Title** | **Human Factors in Aviation** |
| **Course Unit Code** | **AVM308** |
| **Type of Course Unit** | **Compulsory, Aviation Management** |
| **Level of Course Unit** | **3rd 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** | **6** |
| **Semester when the course unit is delivered** | **3** |
| **Course Coordinator** |  |
| **Name of Lecturer (s)** |  |
| **Name of Assistant (s)** |  |
| **Mode of Delivery** | **Face to Face and E-learning activities** |
| **Language of Instruction** | **English** |
| **Prerequisities and co-requisities** | **-** |
| **Recommended Optional Programme Components** | **Basic background of Fundamentals of Aviation** |
| **Objectives of the Course:*** **Teaching the philosophy of human factors.**
* **Teaching the classification and explain the factors that affect human performance**
* **Teaching the capabilities and limitations of human performance.**
 |
| **Course Description** |

|  |
| --- |
| **This course examines the importance of human factors in aviation and overview the system perspective of human role in aviation functions and considers also cognitive architecture of the human factors from maintenance perspective.** |
| **Course Contents** |
| **Week** |  | **Exams** |
| **1** | **Introduction to Human Factors** |  |
| **2** | **Understanding the term “Human Factors” in Aviation Describe the scope and philosophy of****human factors** |  |
| **3** | **History of Human Factors** |  |
| **4** | **Classify and explain the factors that affect human performance** |  |
| **5** | **Describe human error and explain methods used to classify human error** | **Quiz #1** |
| **6** | **Seminars by students** |  |
| **7** | **Tutorial and Revision Class** |  |
| **8** | **Midterm Exam** | **Midterm** |
| **9** | **Describe and explain types of errors** |  |
| **10** | **Explain Management of human errors, Engineering control strategies** |  |
| **11** | **Explain Administrative Control strategies and Examples of common Maintenance Errors.** |  |
| **12** | **Discuss the role of labour in human-error management.** | **Quiz #2** |
| **13** | **Discuss the capabilities and limitations of human performance, including key individual****differences.** |  |
| **14** | **Seminars by students , Exercise and Tutorial Class** |  |
| **15** | **Final Exam** | **Final** |
| **Recommended Sources** |
| **Textbook:****Supplementary Material(s):** |
| **Assessment** |
| **Attendance** | **5%** |  |  |  |  |  |
| **Assignments** | **5%** |  |  |  |  |  |
| **Project-Seminar** | **5%** |  |  |  |  |  |
| **Midterm Exam** | **30%** | **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 homeworks** | **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** |