

MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH

«SALAHADDIN UNIVERSITY – ERBIL (SUE)»

COLLEGE OF ENGINEERING

AVIATION ENGINEERING DEPARTMENT



Subject «Aviation Security and Flight Safety Management
System»

Fall Semester

Class: 2nd stage

Lecturer: Dr. Heersh S.A.

B. Sc. In Aerospace Engineering.

M. Sc. In Flight-Type Engines.

PhD. In Aviation and Rocket-
Space Technology.

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Erbil 2023 - 2024

Syllabus

1. Course name	Aviation Security and Flight Safety Management System
2. Lecturer in charge	Dr. Heersh Saleem Ahmed
3. Department/ College	Aviation Engineering Department / College of Engineering
4. Contact	e-mail: heersh.ahmed@su.edu.krd Tel: 07504492302
5. Time (in hours) per week	Theory: 3 Practical: 2
6. Office hours	4 hours
7. Course code	9019
8. Teacher's academic profile	- B.Sc. In Aerospace Engineering, Russia, 2014. - M.Sc. in Flight-Type Engines, Russia, 2016. - PhD. In Aviation and Rocket-Space Technology from Kazan National Research Technical University named after A.N. Tupolev – KAI, Kazan - Russia, 2021. - Laboratory assistant (Turbojet engine TJ-100A-Z), Kazan National Research Technical University named after A.N. Tupolev – KAI, Russia, 2017 - 2021.
9. Keywords	Aviation security, Flight safety, Management system of aircraft.
10. Course overview:	This course introduces the student to the terminology, principles and methods used in engineering Safety management seeks to proactively mitigate safety risks before they result in aviation accidents and incidents. Through the implementation of safety management, States can manage their safety activities in a more disciplined, integrative and focused manner. Possessing a clear understanding of its role and contribution to safe operations enables a State, and its aviation industry, to prioritize actions to address safety risks and more effectively manage its resources for the optimal benefit of aviation safety.
11. Course objective:	At the end of this course, students will be able to explain the meaning and definition of safety in aviation, the concept of safety, principles of safety management and hazards and risk management.
12. Student's obligation	The students are asked to attend all the lectures and they should arrive on time to the class and that is their responsibility to find out what assignment to be made when they are absent. They should active participation in the class for their successes. The student must participate in all quizzes and exams. He has to present all the homework at the required time.
13. Forms of teaching	Using a whiteboard tool to cover in details all the required explanation and data show.
14. Assessment scheme	<ul style="list-style-type: none"> – 18% Quizzes, Seminar, Report & Activity – 20% Mid-term exam – 12% Project – 50% Final theoretical exam
15. Student learning outcome:	Enhanced risk awareness and response, develop security culture and human capability, improve technological resources and innovation; improve oversight and quality assurance, Increase cooperation and support.
16. Course Reading List and References:	

<ul style="list-style-type: none"> - Airbus. (2018, May). A Statistical Analysis of Commercial Aviation Accidents 1958-2017. Retrieved from https://www.airbus.com/content/dam/corporate-opics/publications/safety-first/Airbus-Commercial-Aviation-Accidents-1958-2017.pdf. - Allianz Global Corporate & Specialty. (2014) Global Aviation Safety Study – A review of 60 years of improvement in aviation safety. Retrieved from https://www.agcs.allianz.com/assets/PDFs/Reports/AGCS-Global-Aviation-Safety-Study-2014.pdf 	
17. The Topics:	Lecturer's name
<p>week 1: Airport Surface Operations</p> <p>week 2: Crew Alerting Management</p> <p>week 3: Hazardous Material Transportation</p> <p>week 4: Administrative Practices & Procedure</p> <p>week 5: Aircraft Rescue & Fire Fighting System</p> <p>week 6: ICAO Standard & Recommended Practices</p> <p>week 7: Civil Aviation Security</p> <p>week 8: Role of DGCA/BCAS in Aviation Safety and Security</p> <p>week 9 : Aviation Safety Human Factor</p> <p>week 10: Air Operation Areas Safety Management</p> <p>week 11: Air Transport Safety Management Principle</p> <p>week 12 : Principles of System Safety</p> <p>week 13 : Reliability Fundamental Theories</p> <p>week 14: Rules of the air and air traffic services</p> <p>week 15: Appendix</p>	<p>Heersh Saleem Ahmed</p>
18. Practical Topics	
<ul style="list-style-type: none"> - All lecture material up to the date of the test. - Understanding of application of theoretical flight safety to real world device. - All course content from weeks 1-15 inclusive. 	
19. Examinations:	
All relative topics in both theory, the student has to finish the entire requirement to meet the syllabus.	
20. Extra notes:	
The students should support themselves be able to solve and design project daily by them and not neglect the subject.	
21. Peer review:	
Attendance at all theory and laboratory experiments to which you are assigned is compulsory and a register is taken. If you are unable to attend, due to illness, it is important that you inform the head demonstrator as soon as possible so that you may be reassigned to a later experiment.	