Subject Description Form

Subject Code	AAE2004
Subject Title	Introduction to Aviation System and Air Transport Regulation
Credit Value	3
Level	2
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	This subject will provide students with 1. An overview of air transport operations and aviation system to a diverse audience that has an interest in the development of careers in aviation; 2. The knowledge of regulation and the responsibility of official bodies in fostering civil aviation safety and operations; and 3. Up-to-date operational concepts and practices in aviation.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a. Identify and explain mandatory airworthiness requirements; b. Describe the aviation environmental impact and published mitigating measures; and c. Explain the roles of the International Civil Aviation Organisation and the International Air Transport Association in fostering safe and efficient air transport.
Subject Synopsis/ Indicative Syllabus	**Airline Organisation –** Air Operator's Certificate; Route planning. Airline operations; Flight operations; Aviation security training. **Airport Operations** – Overview of airport planning and operations; Passenger and cargo terminal operations; Maintenance of electrical, mechanical, and electronic systems: Safety management on airport operations. Operations and development of airport facilities; Role of air traffic controls; Aviation security and runway system design; Take-off and landing separation minima; Reduced vertical separation minima. **Aviation and the Environment** – Environmental impacts of aviation; aircraft emissions and noise; HK CAD noise abatement departure and noise mitigating measures. **International Associations** – International Civil Aviation Organisation (ICAO); Airport Council International (ACI); International Air Transport Association (IATA).

Teaching/Learning Methodology

Lectures are used to deliver the fundamental knowledge in relation to various aspects of aviation systems (outcomes a to c).

Case studies are used to illustrate the application of fundamental knowledge to practical situations (outcomes a to c).

Projects are used to help students to deepen their knowledge on a specific topic through search of information, analysis of data and report writing (outcomes a to c).

Teaching/Learning Methodology	Intended subject learning outcomes to be covered		
	a	b	c
1. Lecture	✓	✓	✓
2. Case studies	✓	✓	✓
3. Project	✓	✓	✓

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed		
		a	b	c
1. Assignments	30%	✓	✓	✓
2. Group Project	30%	✓	✓	✓
3. Examination	40%	✓	✓	✓
Total	100%			

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Overall Assessment:

0.40 × End of Subject Examination + 0.60 × Continuous Assessment

Examination is adopted to assess students on the overall understanding and the ability of applying the concepts. It is supplemented by continuous assessment including assignments and group project. The continuous assessment is aimed at enhancing the students' comprehension and assimilation of various topics of the syllabus. A group project is used to assess the students' capacities of self-learning and problem-solving and effective communication skills in English to fulfil the requirements of working in the aviation industry.

Student Study Effort Expected	Class contact:	
	▪ Lecture/Project	39 Hrs.
	Other student study effort:	
	▪ Course work	39 Hrs.
	▪ Self-study	39 Hrs.
	Total student study effort	117 Hrs.
Reading List and References	1. Richard De Neufville. Airport Systems: Planning, Design, and Management, McGraw-Hill, latest edition. 2. HK Government. Air Navigation (Hong Kong) Order, latest amendment. 3. HK CAD. Aeronautical Information Publication, latest update.	

Revised in June 2022