

開南大學 96 年度第 1 學期 空運系 學系、所、中心科目教學計劃表

課程編號	1	5	7	0	2	2	3	0	0	<input type="checkbox"/> 必修 <input checked="" type="checkbox"/> 選修	授課教師： 許清賢 老師
班次	空運系 進修學士班 空二 A										開課系所： 空運系 學系
課程名稱(中文)										學分數	課程名稱(英文)
飛航概論										2	The Introduction of Aviation
教學目標 與內容	<p>以科普精神對於航空工程作廣泛、深入而淺出的介紹，使非工程學門的學生，對於航空工程各領域都有相當程度的瞭解，並針對本系空運管理的特性，以民航機應用為主軸，介紹飛航工程基本的概念及飛行的基本原理；內容有「飛機結構」、「升力的產生」、「機翼概論」、「飛行材料」、「控制與平衡」、「推進系統」、「高速飛行展望」等均有詳盡的詮釋。</p> <p>This course is designed by the spirit of popular science to introduce all areas in the aviation engineering broadly and profoundly, which allows students who are not major in engineering can realize generally. Focusing on the stance of aerial transport management as well, it introduces from the application of civil airliner to the basic concepts of aviation engineering and the rationale of flying, which includes the explicit explanation of: the structure of airplane, the arising of lifting force, the overview of airfoil, the material of flight, controlling and balance, the propulsion system, and the perspective of high-speed flight.</p>										
實施方法	V 講解法 實作法 討論法 演習法 V 問答法 其他(作業 1-5 上傳)。										
評量方式	期中測驗 30 % 。期末測驗 30 % 。平時成績(點名) 20 % 。其他(作業與小考) 成績 20 % 。										
授課使用及 參考書籍	(請按作者、書名、版別、出版商、發行地、出版年份、起訖頁數順序填寫)。										
	Text: 夏樹仁 編著 飛行工程概論 初版 全華科技圖書 台北市 民 92. Ref: 1. 王懷柱 編著 揭開飛行的奧秘 三版 全華圖書 台北市 民 90. 2. 張哲銘 編著 航空工程概論 初版 普林斯頓國際有限公司 台北市 民 94 3. Anderson, John D., Jr. Introduction to Flight, 4th ed., McGraw Hill 2000. 4. John P. Fielding, Introduction to Aircraft Design, Cambridge University Press, 1999.										
科目簡介(可含大綱及教學進度)：											

課程進度	Schedule
1. 前言	Introduction
2. 飛行史話	The history of aviation
3. 談些掌故	Some aviatic anecdotes
4. 大氣概況-----空氣的性質	The atmosphere: the nature of air
5. 飛行奧秘-----動物飛行概論	The secret of flight: how can animal fly
6. 人類動力飛行簡史	The history of human's powered flight
7. 民航機發展歷史	The history of the development of civil airliner
8. 期中考	Mid-term exam.
9. 飛機之基本架構與飛行器材料	The basic structure and the material of airplane
10. 飛行基本理論-----升力、阻力與推力	The basic flight theory: lifting, resistance, and thrust force
11. 飛機推進系統-----發動機概說	The propulsion system: the overview of motor
12. 現代民航機-----波音	Modern civil airliner: Boeing
13. 現代民航機-----空中巴士	Modern civil airliner: Airbus
14. 高速航行及展望	The envision of high-speed aviation
15. 期末考	End-term exam.

說明：

- 授課教師於學期前填寫本表，經課程委員會審核後，影印分送給教師所屬課程委員會召集人，授課班級所屬系、所及教務處課務組；並於開始上課時，將本內容向學生說明。
- 本表於 91.4.23 第四次校課程委員會討論通過。

課程委員會召集人：

空運系主任 尹相隆

授課教師：許清賢

許清賢
9/15



Kainan University Department of Air Transportation

Syllabus for ___ The Introduction of Aviation

Course Code No.	Course Title	Instructor	Subject	Level of Course	Credits	Hours per Week
157022300	Chinese: 飛航概論	許清賢老師 / Tsing-Shien Sheu	<input type="checkbox"/> required <input type="checkbox"/> V elective	Year: 進 / 夜 二年 Class: A 班	2	2
	English: The Introduction of Aviation.	Course Prerequisites				
Teaching Goals and Content	This course is designed by the spirit of popular science to introduce all areas in the aviation engineering broadly and profoundly, which allows students who are not major in engineering can realize generally. Focusing on the stance of aerial transport management as well, it introduces from the application of civil airliner to the basic concepts of aviation engineering and the rationale of flying, which includes the explicit explanation of: the structure of airplane, the arising of lifting force, the overview of airfoil, the material of flight, controlling and balance, the propulsion system, and the perspective of high-speed flight.					
Teaching Methods	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> practical training <input type="checkbox"/> discussion <input checked="" type="checkbox"/> question-and-answer <input checked="" type="checkbox"/> other (details _ Homework and Quiz _)					
Grading and Evaluation Criteria	midterm __30 % final __30 % class participation __20 % other __20 % (details __ Homework and Quiz)					
Textbooks	(author, title, edition, publisher, place of publication, year of publication, pages covered)					
	Text: 夏樹仁 編著 飛行工程概論 初版 全華科技圖書 台北市 民 92. Ref: 1. 王懷柱 編著 揭開飛行的奧秘 三版 全華圖書 台北市 民 90. 2. 張哲銘 編著 航空工程概論 初版 普林斯頓國際有限公司 台北市 民 94 3. Anderson, John D., Jr. Introduction to Flight, 4th ed., McGraw Hill 2000. 4. John P. Fielding, Introduction to Aircraft Design, Cambridge University Press, 1999.					
Course Description (including outline and course schedule):						



Course Schedule:

1. Introduction
2. The history of aviation
3. Some aviatic anecdotes
4. The atmosphere: the nature of air
5. The secret of flight: how can animal fly
6. The history of human's powered flight
7. The history of the development of civil airliner
8. Mid-term exam.
9. The basic structure and the material of airplane
10. The basic flight theory: lifting, resistance, and thrust force
11. The propulsion system: the overview of motor
12. Modern civil airliner: Boeing
13. Modern civil airliner: Airbus
14. The envision of high-speed aviation
15. End-term exam.

Instructions:

1. Teachers should fill out this form before the semester begins. After it has been verified by the curriculum committee, the original should be given to the office of curriculum planning and a copy to the head of the department to which the course belongs. In addition, the teacher should explain this syllabus to students at the beginning of a semester.
2. This form was approved by the curriculum committee on April 23, 2002.

空運系 尹相隆
主任

signature of the convener of the curriculum committee

許清賢老師 / Tsing-Shien Sheu

signature of the teacher

許清賢
9/5

課務組
98.9.17
收文章