

The Hong Kong Polytechnic University

Subject Description Form

Subject Code	LGT4800
Subject Title	Airline Strategy and Management
Credit Value	3
Level	4
Normal Duration	1-semester
Pre-requisite	Nil
Objectives	Airlines operate in highly complex and competitive market environments in which successful businesses depend crucially on the understanding of how rival airlines, partner airlines, airports, rival rail operating companies and even governments interact strategically. This understanding then helps to anticipate their behavior and can be used to develop own strategies that can ensure the successful and sustainable operations. The main purpose of this subject to sharpen the students' capability to think strategically and to use this skill to evaluate and develop own successful airline strategies.
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> understand economic concepts and theories behind airline business and develop approaches to analyzing and formulating airline strategies. develop awareness to various issues involved in airline business practice. understand the means by which airlines create values. (BBA outcome 6) demonstrate an understanding on the applications of data science in airline business.
Subject Synopsis/ Indicative Syllabus	<ul style="list-style-type: none"> • Airline industry and business environment: <ul style="list-style-type: none"> - major external influential factors and constraints - operating performance: yield, unit cost, load factor, traffic, output - Porter's five forces • Airline business models <ul style="list-style-type: none"> - deregulation and liberalization and changes in airline business models - Porter's competitive strategy - full-service airlines vs. low-cost airlines, low-cost subsidiaries • Air travel demand <ul style="list-style-type: none"> - definition of markets - drivers for airline demand - demand elasticities • Revenue-maximizing pricing strategies <ul style="list-style-type: none"> - market segmentation and price discrimination - basics of revenue management • Airline cost structures and optimal output

	<ul style="list-style-type: none">- fixed vs. variable costs, marginal cost, economies of scale and density, productivity- profit-maximizing output- frequency versus aircraft size <ul style="list-style-type: none">• Network strategies<ul style="list-style-type: none">- hub-and-spoke vs. point-to-point- hubbing strategies• Airline competition and cooperation<ul style="list-style-type: none">- frequency and market share- strategies to deal with new entrants- market structure and competition, entry barriers- competition policy- global alliances, code-sharing, mergers and acquisitions• Application of data science in airline management																												
Teaching/Learning Methodology	A combination of lectures, tutorials, case studies, group discussions and students-directed learning activities will be included in this subject.																												
Assessment Methods in Alignment with Intended Learning Outcomes	<table><tr><th rowspan="2">Specific assessment methods/tasks</th><th rowspan="2">% weighting</th><th colspan="4">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th></tr><tr><th>a</th><th>b</th><th>c</th><th>d</th></tr><tr><td>Coursework</td><td>50%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr><tr><td>Examination</td><td>50%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr><tr><td>Total</td><td>100 %</td><td colspan="4"></td></tr></table> <p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p>	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)				a	b	c	d	Coursework	50%	✓	✓	✓	✓	Examination	50%	✓	✓	✓	✓	Total	100 %				
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Student Study Effort Expected	<table><tr><td>Class contact:</td><td></td></tr><tr><td>▪ Lecture</td><td>26 Hrs.</td></tr><tr><td>▪ Tutorial</td><td>13 Hrs.</td></tr><tr><td>Other student study effort:</td><td></td></tr><tr><td>▪ Self study</td><td>87 Hrs.</td></tr><tr><td>Total student study effort</td><td>126 Hrs.</td></tr></table>	Class contact:		▪ Lecture	26 Hrs.	▪ Tutorial	13 Hrs.	Other student study effort:		▪ Self study	87 Hrs.	Total student study effort	126 Hrs.																
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Reading List and References	Recommended Textbooks																												

	<ul style="list-style-type: none"> • Cook, G. N. and Billig, B. (2017). <i>Airline Operations and Management</i>, 1st ed., Florence: Routledge. • Holloway, Stephen (2016) <i>Straight and Level: Practical Airline Economics (3rd Edition)</i>, Ashgate: Aldershot, UK. <p>Useful References</p> <ul style="list-style-type: none"> • Delfmann, W., Baum, H., Auerbach, S. and Albers, S. (2017). <i>Strategic Management in the Aviation Industry</i>, Ashgate. • Doganis, R. (2019) <i>Flying Off Course – Airline Economics and Marketing (5th Edition)</i>, Routledge, London. • Wensveen, John G. (2016). <i>Air Transportation: A Management Perspective</i>, Ashgate. • Chung, S.-H., Ma, H.-L., Hansen, M. and Choi, T.-M. (2020) Data science and analytics in aviation, <i>Transportation Research Part E: Logistics and Transportation Review</i>, 134, 101837.
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