

The Hong Kong Polytechnic University

Subject Description Form

Subject Code	LGT3803
Subject Title	Aviation Finance
Credit Value	3
Level	3
Normal Duration	1-semester
Pre-requisite	Nil
Objectives	To help students understand basic concepts in finance. To highlight fundamental finance problems related to airline and airport services. To provide students with an understanding of future developments in the air finance industry.
Subject Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> Understand the advantages and drawbacks of volatile market environments Develop the awareness for important issues involved in airline and airport finance practice Understand the means by which financing decisions create values to airlines and airports (BBA Outcome 8b) Demonstrate an understanding on the applications of data science and new technologies in aviation finance (BBA Outcome 11c)
Subject Synopsis/ Indicative Syllabus	<p><u>Generic topics</u></p> <ul style="list-style-type: none"> • Volatility <ul style="list-style-type: none"> - Measurement - Assessment of volatility part 1 • Risk preferences <ul style="list-style-type: none"> - Types of risk preferences - Assessment of volatility part 2 <p><u>Airline related topics</u></p> <ul style="list-style-type: none"> • Fuel hedging <ul style="list-style-type: none"> - Why hedging? - Hedging strategies • Aircraft leasing (topic 1: video assignment, group work) <ul style="list-style-type: none"> - Why leasing? - Types of leasing contracts - Global leasing platforms

	<ul style="list-style-type: none"> Fintech & Payment Services (topic 2: video assignment, group work) <u>Airport related topics</u> <ul style="list-style-type: none"> Infrastructure financing: A case study The timing of airport investments: Real option analysis Slot trading and slot auctions <ul style="list-style-type: none"> IATA scheduling guidelines Slot trading practices Second- and first-price auctions Application to greenhouse gas emissions policies 																																
Teaching/Learning Methodology	A combination of lectures, real-case studies, guest talks by industry experts (online and/or face-to-face), a group video assignment (groups can choose between picking topics 1 leasing or 2 fintech), and elements of a “flipped classroom” based on video material will be included in this subject.																																
Assessment Methods in Alignment with Intended Learning Outcomes	<table border="1"> <thead> <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> </thead> <tbody> <tr> <td>Coursework</td><td>40%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr> <tr> <td>Examination</td><td>60%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr> <tr> <td>Total</td><td>100 %</td><td colspan="4"></td></tr> </tbody> </table> <p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p>Coursework and examination are both important for the assessment of each of the intended learning outcomes. The coursework part includes participation measured by the (meaningful) participation in the discussion forum.</p> <p>To reflect the significant technology content in this subject, <i>10% (or more)</i> of the overall weighting of this subject is based on individual assessment concerning technology-related knowledge.</p>					Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)				a	b	c	d	Coursework	40%	✓	✓	✓	✓	Examination	60%	✓	✓	✓	✓	Total	100 %				
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Student Study Effort Expected	Class contact:																																
	▪ Lecture		26 Hrs.																														
	▪ Tutorial		13 Hrs.																														
	Other student study effort:																																
	▪ Self study		87 Hrs.																														
	Total student study effort		126 Hrs.																														

<p>Reading List and References</p>	<p>Useful references (alphabetical order):</p> <ul style="list-style-type: none"> • Brueckner, J.K. and Whalen, W.T. (2000). The price effects of international airline alliances. <i>Journal of Law and Economics</i> 43, 503-545. • CAPA Centre for Aviation. Sofia Airport: Bulgaria appoints Meridiam/Munich Airport consortium. https://centreforaviation.com/analysis/reports/sofia-airport-bulgaria-appoints-meridiammunich-airport-consortium-484294 • Guzhva, V. S., Raghavan, S. and D'Agostino, D. J. (2019). Aircraft leasing and financing. Tools for success in international aircraft acquisition and management. Elsevier. • International Air Transport Association, 2017. The dangers of slot auctions. https://airlines.iata.org/analysis/the-dangers-of-slot-auctions • International Air Transport Association, 2019. Worldwide scheduling guidelines.
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