

The Hong Kong Polytechnic University

Subject Description Form

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| Subject Code | LGT4012 |
| Subject Title | Airport Management |
| Credit Value | 3 |
| Level | 4 |
| Normal Duration | 1-semester |
| Pre-requisite | Nil |
| Role and Purposes | <p>Airport businesses have undergone fundamental changes in their business environments in the last couple of decades. The liberalization of air transport markets, the subsequent huge growth of air traffic, the development of new airline business models, the ever growing importance of non-aeronautical businesses, privatization strategies, airport expansion plans, and new and innovative methods of economic airport regulation contributed to the development of an exciting industry with tremendous business opportunities but also substantial social responsibilities. This subject handles all these issues. It explains general facts of the air transport industry, and how airport businesses have developed over time, why airports are often subject to heavy economic regulation and how regulation influences airport businesses. The purpose is to help the students to develop a profound understanding of the most important drivers of airport businesses today (Outcome 10), and to offer ways to successfully address the challenges arising from historic and current industry developments (Outcomes 3 and 8).</p> |
| Subject Learning Outcomes | <p>The aim of this subject is to meet the demand in the air transport industry. Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> a. contribute to the solution of business related problems in privately and publicly owned airports; b. foster intellectual and personal development, self confidence and the ability to tackle problems without supervision; c. develop a deep understanding of the “big picture” that describes airport management environments; d. develop approaches to defining, analysing and solving airport management issues; e. develop the ability to communicate effectively and fluently in both written and spoken form; and <p>Studying this subject will also help develop students’ global outlook, critical and creative thinking, social and national responsibility, cultural appreciation, life-long learning, and entrepreneurship and leadership.</p> |
| Subject Synopsis/ Indicative Syllabus | <ul style="list-style-type: none"> • <u>Liberalization</u>: This covers the development of aviation markets in the Asia-Pacific region, the United States and Europe. |

| | <ul style="list-style-type: none"> • <u>Public supply</u>: Airports are often owned and operated by government agencies. This is different from many other industries that are mainly driven by private companies. This part discusses some benefits of the public supply of transport infrastructure. • <u>Natural monopoly</u>: Here students will be provided with a data set and some econometric methods to analyze airport cost structures. This helps to understand why airports are often considered as “natural monopolies.” • <u>Privatization and “non-aeronautical services:”</u> Nowadays private involvement in airport ownership in operation has substantially increased. Furthermore, many airports earn a large share of their revenues from the supply of services that are not primarily related to airport infrastructure (so called non-aeronautical services. The implications of these developments for the optimal pricing of airport infrastructure is a major theme of this subject. • <u>Regulation</u>: Private involvement often comes together with some form of airport infrastructure charges regulation. The benefits and drawbacks of different forms of regulation are discussed in detail in this class. Regulation forms discussed in class include cost-based regulation, price-cap regulation • <u>Competition</u>: Airports are often considered as natural monopolies, while they still compete in various dimensions. This part covers the competition between neighboring airports, competition for transfer passengers and the role of the evolving airport and airline businesses for airport market power. • <u>Infrastructure charges structures</u>: Airports raise many types of infrastructure charges. Here, we distinguish between aircraft-weight related and per-passenger based airport charges and discuss their implications for airlines and passengers. • <u>Congestion</u>: The tremendous growth in air traffic is often associated with shortages in infrastructure supply, which then leads to a drop of service quality in terms of airline punctuality. How airlines strategically react to such shortages and its implications for airport infrastructure pricing is discussed in detail in this class. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Teaching/Learning Methodology | A combination of lectures, guest talks by industry experts (online and face-to-face), company visits, real case studies and students-directed learning activities 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="6">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> <th>e</th> <th></th> </tr> </thead> <tbody> <tr> <td>1. Coursework</td> <td>40%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>2. Examination</td> <td>60%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> </tr> <tr> <td>Total</td> <td>100 %</td> <td colspan="6"></td> </tr> </tbody> </table> <p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p><i>To pass this subject, students are required to obtain Grade D or above in BOTH the Continuous Assessment and Exam components.</i></p> | Specific assessment methods/tasks | % weighting | Intended subject learning outcomes to be assessed (Please tick as appropriate) | | | | | | a | b | c | d | e | | 1. Coursework | 40% | ✓ | ✓ | ✓ | ✓ | | | 2. Examination | 60% | ✓ | ✓ | ✓ | ✓ | ✓ | | Total | 100 % | | | | | | |
| Specific assessment methods/tasks | % weighting | | | Intended subject learning outcomes to be assessed (Please tick as appropriate) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1. Coursework | 40% | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. 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. |
| Reading List and References | <p>Czerny, A. I., Shi, Z. and Zhang, A. (2016), Can market power be controlled by regulation of core prices alone?: An empirical analysis of airport demand and car rental price, <i>Transportation Research Part A</i> 91, 260-272.</p> <p>Czerny, A. I., Guiomard, C. and Zhang, A. (2016), Single-till versus dual-till regulation of airports – Where do academics and regulators (dis)agree?, <i>Journal of Transport Economics and Policy</i> 50, 350-368.</p> <p>Fu, X., Oum, T. H., Chen, R. and Lei, Z. (2015), Dominant carrier performance and international liberalization – The case of Northeast Asia, <i>Transport Policy</i> 43, 61-75.</p> <p>Graham, A. (2013), <i>Managing Airports: An International Perspective</i>, 4th Edition, Routledge, London.</p> <p>Zhang, A. (2012), Airport improvement fees, benefit spillovers, and land value capture mechanisms, in: Ingram, G.K., Hong, Y.-H. (Eds.), <i>Value Capture and Land Policies</i>. Lincoln Institute of Land Policies: 323-348.</p> <p>Zhang, A. and Czerny, A. I. (2012), Airports and airlines economics and policy: An interpretive review of recent research, <i>Economics of Transportation</i> 1: 15-34.</p> | |