

# The Hong Kong Polytechnic University

## Subject Description Form

<b>Subject Code</b>	LGT5164
<b>Subject Title</b>	Aviation Safety Management
<b>Credit Value</b>	3
<b>Level</b>	5
<b>Normal Duration</b>	1-semester
<b>Pre-requisite</b>	Nil
<b>Role and Purposes</b>	To provide the student with an understanding of the key issues in aviation safety management, the implementation of Safety Management Systems, and how safety is managed in airlines, airports and aviation-related companies.
<b>Subject Learning Outcomes</b>	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> <li>a. Describe the fundamental concepts behind Safety Management Systems (SMS), as defined by ICAO and other parties.</li> <li>b. Select and implement techniques for the identification and management of hazards and risks.</li> <li>c. Understand key issues in the implementation of Safety Management Systems</li> <li>d. Critically assess the ways in which safety is measured and managed in airport, airline and other aviation operations.</li> </ol>
<b>Subject Synopsis/ Indicative Syllabus</b>	<ul style="list-style-type: none"> <li>• Safety management philosophy and implementation</li> <li>• Safety supervision in civil aviation</li> <li>• Principles of quality management</li> <li>• Hazard identification</li> <li>• Process-based safety risk management</li> <li>• Crisis management</li> <li>• Emergency response planning</li> <li>• Safety culture</li> <li>• Human factors</li> <li>• Managing the Safety Management Systems</li> <li>• Implementing an Safety Management Systems</li> </ul>

<b>Teaching/Learning Methodology</b>	A combination of lectures, seminars, case studies, group workshops and students-directed learning activities will be included in this subject.																																													
<b>Assessment Methods in Alignment with Intended Learning Outcomes</b>	<table border="1" data-bbox="529 412 1479 819"> <thead> <tr> <th data-bbox="529 412 836 613" rowspan="2">Specific assessment methods/tasks</th> <th data-bbox="836 412 991 613" rowspan="2">% weighting</th> <th colspan="6" data-bbox="991 412 1479 539">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th data-bbox="991 539 1070 613">a</th> <th data-bbox="1070 539 1150 613">b</th> <th data-bbox="1150 539 1230 613">c</th> <th data-bbox="1230 539 1310 613">d</th> <th data-bbox="1310 539 1390 613"></th> <th data-bbox="1390 539 1479 613"></th> </tr> </thead> <tbody> <tr> <td data-bbox="529 613 836 680">Coursework</td> <td data-bbox="836 613 991 680">50%</td> <td data-bbox="991 613 1070 680">✓</td> <td data-bbox="1070 613 1150 680">✓</td> <td data-bbox="1150 613 1230 680">✓</td> <td data-bbox="1230 613 1310 680">✓</td> <td data-bbox="1310 613 1390 680"></td> <td data-bbox="1390 613 1479 680"></td> </tr> <tr> <td data-bbox="529 680 836 748">Examination</td> <td data-bbox="836 680 991 748">50%</td> <td data-bbox="991 680 1070 748">✓</td> <td data-bbox="1070 680 1150 748">✓</td> <td data-bbox="1150 680 1230 748">✓</td> <td data-bbox="1230 680 1310 748">✓</td> <td data-bbox="1310 680 1390 748"></td> <td data-bbox="1390 680 1479 748"></td> </tr> <tr> <td data-bbox="529 748 836 819">Total</td> <td data-bbox="836 748 991 819">100 %</td> <td colspan="6" data-bbox="991 748 1479 819"></td> </tr> </tbody> </table> <p data-bbox="529 869 1479 936">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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Total	100 %																																													
<b>Student Study Effort Expected</b>	Class contact:																																													
	▪ Lectures / Tutorials							39 Hrs.																																						
	Other student study effort:																																													
	▪ Self study							87 Hrs.																																						
	Total student study effort							126 Hrs.																																						
<b>Reading List and References</b>	<p data-bbox="529 1469 608 1503"><b>Books</b></p> <ul data-bbox="529 1525 1479 1930" style="list-style-type: none"> <li data-bbox="529 1525 1479 1592">• Ferguson, M. and Nelson, S. (2013) <i>Aviation Safety: A Balanced Industry Approach</i>, Cengage Learning.</li> <li data-bbox="529 1592 1479 1704">• ICAO (2009) <i>Safety Management Manual</i> (2<sup>nd</sup> Edition), Doc. 9859, Montreal – Downloadable from <a href="http://www.icao.int/anb/safetymanagement/documents.html">http://www.icao.int/anb/safetymanagement/documents.html</a>.</li> <li data-bbox="529 1704 1479 1771">• Rodingues, C. and Cusick, S. (2011). <i>Commercial Aviation Safety</i>, 5<sup>th</sup> Edition, McGraw-Hill Professional.</li> <li data-bbox="529 1771 1479 1839">• Stolzer, A.J., Halford, C.D. and Goglia, J.J. (2008) <i>Safety Management Systems in Aviation</i>, Ashgate, Aldershot UK.</li> <li data-bbox="529 1839 1479 1930">• Stolzer, A.J., Halford, C.D. and Goglia, J.J. (2013), <i>Implementing Safety Management Systems in Aviation</i>, Ashgate, Aldershot UK.</li> </ul>																																													