

## The Hong Kong Polytechnic University

### Subject Description Form

<b>Subject Code</b>	AP601
<b>Subject Title</b>	Research seminars I
<b>Credit Value</b>	2
<b>Level</b>	6
<b>Pre-requisite / Co-requisite/ Exclusion</b>	None
<b>Objectives</b>	<p>The main objectives of this series of research seminars/workshops is to</p> <ul style="list-style-type: none"> <li>• provide an opportunity for our research students and research staff to present the latest results of their research achievement to their peers,</li> <li>• bring together research students, research staff, and professors within AP department to exchange and share knowledge and experience on various aspects of scientific research,</li> <li>• provide an in-depth analysis and study of specific research topics and update the knowledge of recent development in the related research communities, and to</li> <li>• invite local and oversea research scientists/professors to present their recent advancement and/or to explain their view in the future development of research areas of excellent.</li> </ul> <p>Hence, this series of research seminars/workshops will</p> <ul style="list-style-type: none"> <li>• bring together research students, research staff, academicians and experts to exchange and share knowledge and experience on various aspects of scientific research with the invited speakers, and</li> <li>• improve our connection and visibility to the research communities.</li> </ul>
<b>Intended Learning Outcomes</b>	<p>Upon completion of the research seminars /workshops, students will be able to:</p> <ul style="list-style-type: none"> <li>• achieve instant critical thinking – analysis and evaluation of assumption, claims, evidence, and arguments during the short period of discussion as well as raise questions.</li> <li>• improve information literacy – develop capability to distinguish different kinds of information sources, composing search strategies, and retrieving useful and relevant information.</li> <li>• refine communication skill – demonstrate the capability in written and spoken (English as a medium) to present and discuss research information within the scientific community and society.</li> <li>• establish networking – get to know researchers and scientists in their field of studies.</li> </ul>
<b>Subject Synopsis/ Indicative Syllabus</b>	<ul style="list-style-type: none"> <li>• Nanomaterials included 2D materials</li> <li>• Photonic Materials and Devices</li> <li>• Smart Materials and Devices</li> <li>• Theoretical and Computational Physics</li> </ul>

<b>Teaching/Learning Methodology</b>	In order to stimulate and motivate the students' interest in the seminar/workshop participation, the hottest and latest advancement research topics will be presented. This will lead to the students' further exploration of potential novel research directions and studies as well as stimulated the students' creative thinking.																																																				
<b>Assessment Methods in Alignment with Intended Learning Outcomes</b>	<table border="1" data-bbox="517 416 1474 835"> <thead> <tr> <th data-bbox="517 416 874 555" rowspan="2">Specific assessment methods/tasks</th> <th data-bbox="874 416 1018 555" rowspan="2">% weighting</th> <th colspan="6" data-bbox="1018 416 1474 517">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th data-bbox="1018 517 1098 555">a</th> <th data-bbox="1098 517 1177 555">b</th> <th data-bbox="1177 517 1257 555">c</th> <th data-bbox="1257 517 1337 555"></th> <th data-bbox="1337 517 1417 555"></th> <th data-bbox="1417 517 1474 555"></th> </tr> </thead> <tbody> <tr> <td data-bbox="517 555 874 622">1. Attendance in 10 research seminars</td> <td data-bbox="874 555 1018 622">40</td> <td data-bbox="1018 555 1098 622">✓</td> <td data-bbox="1098 555 1177 622"></td> <td data-bbox="1177 555 1257 622"></td> <td data-bbox="1257 555 1337 622"></td> <td data-bbox="1337 555 1417 622"></td> <td data-bbox="1417 555 1474 622"></td> </tr> <tr> <td data-bbox="517 622 874 723">2. Submission of one technical report on one of the research seminars</td> <td data-bbox="874 622 1018 723">30</td> <td data-bbox="1018 622 1098 723"></td> <td data-bbox="1098 622 1177 723"></td> <td data-bbox="1177 622 1257 723">✓</td> <td data-bbox="1257 622 1337 723"></td> <td data-bbox="1337 622 1417 723"></td> <td data-bbox="1417 622 1474 723"></td> </tr> <tr> <td data-bbox="517 723 874 768">3. Presentation</td> <td data-bbox="874 723 1018 768">30</td> <td data-bbox="1018 723 1098 768"></td> <td data-bbox="1098 723 1177 768">✓</td> <td data-bbox="1177 723 1257 768"></td> <td data-bbox="1257 723 1337 768"></td> <td data-bbox="1337 723 1417 768"></td> <td data-bbox="1417 723 1474 768"></td> </tr> <tr> <td data-bbox="517 768 874 835">Total</td> <td data-bbox="874 768 1018 835">100</td> <td colspan="6" data-bbox="1018 768 1474 835"></td> </tr> </tbody> </table> <p data-bbox="517 869 1474 969">a) Attendance in research seminars/workshops, b) language proficiency, c) writing skill for technical report. The overall assessment grade is of Pass or Fail.</p>							Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a	b	c				1. Attendance in 10 research seminars	40	✓						2. Submission of one technical report on one of the research seminars	30			✓				3. Presentation	30		✓					Total	100						
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<b>Student Study Effort Expected (per year)</b>	Contact:																																																				
	▪ Seminar attendance						20 Hrs.																																														
	▪ Present at seminar/workshop/conference						2 Hrs.																																														
	Other student study effort:																																																				
	▪ Self-learning, report writing and independent learning						18 Hrs.																																														
	Total student study effort						40 Hrs.																																														
<b>Reading List and References</b>	Provided by the speakers of the seminars/workshops																																																				