

The Hong Kong Polytechnic University

Subject Description Form

Please read the notes at the end of the table carefully before completing the form.

Subject Code	ABCT4709
Subject Title	PROJECT
Credit Value	6
Level	4
Pre-requisite	All Level 1 to Level 3 core compulsory subjects
Objectives	The project is related to the programme of study covered by the Course. The aims of the project are to promote independent and creative thinking, and to train students to develop the academic and practical skills to define, investigate, analyses and solve a scientific/technical problem. The project may involve a critical assessment, analysis and review of the information collected from the literature and internet on an assigned problem in analytical chemistry. The project may include some field work or experimental study on selected topics.
Intended Learning Outcomes <i>(Note 1)</i>	Upon completion of the subject, students will be able to: <ol style="list-style-type: none"> 1. conduct literature search and critically assess the information; 2. demonstrate the ability in carry out analytical research work independently; 3. identify and solve a scientific/technical problem and select appropriate analytical methodologies to solve problems; 4. design and conduct experiments as well as to analyze and interpret data; 5. manage and organize time efficiently; 6. write essay and laboratory report and present results orally in an effective, skilful and professional manner.
Subject Synopsis/ Indicative Syllabus <i>(Note 2)</i>	A study of an assigned problem in analytical chemistry. The study consists of literature survey and an investigation. The investigation should include a research element and may include field work or experimental study on topics in analytical chemistry.
Teaching/Learning Methodology <i>(Note 3)</i>	The project may involve a critical assessment, analysis and review of the information collected from the literature and internet on an assigned problem in analytical chemistry. The project should an investigation with research element and may include field work or experimental study in the selected topics The topic could be related to chemical analysis on various classes of chemical compounds, development of experimental methods/products/equipment for chemical testing. There will be a few lectures to brief the students on issues involving the developing appropriate analytical methodologies for specific problems. A problem-based learning approach will be employed. Each student registered in the project will be supervised by a project supervisor, who is normally a member of the academic, teaching or technical staff. With guidance from the project supervisor, each student should propose his/her own topic of

	<p>investigation. The supervisor's major role is to provide advice and guidance to the student throughout the development of the project. However, the supervisor shall make sure that the guidance leaves the student an ample scope to demonstrate initiative for thinking and working independently and creatively. Each student is required to submit a proposal, a final written report and to deliver an oral presentation.</p>																																																													
<p>Assessment Methods in Alignment with Intended Learning Outcomes</p> <p><i>(Note 4)</i></p>	<table border="1" data-bbox="553 373 1435 1262"> <thead> <tr> <th data-bbox="553 373 932 562" rowspan="2">Specific assessment methods/tasks</th> <th data-bbox="932 373 1068 562" rowspan="2">% weighting</th> <th colspan="6" data-bbox="1068 373 1435 499">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th data-bbox="1068 499 1130 562">1</th> <th data-bbox="1130 499 1192 562">2</th> <th data-bbox="1192 499 1253 562">3</th> <th data-bbox="1253 499 1315 562">4</th> <th data-bbox="1315 499 1377 562">5</th> <th data-bbox="1377 499 1435 562">6</th> </tr> </thead> <tbody> <tr> <td data-bbox="553 562 932 722">1. Project preparation and efficient planning, organization, and execution of the project</td> <td data-bbox="932 562 1068 722">15</td> <td data-bbox="1068 562 1130 722">√</td> <td data-bbox="1130 562 1192 722">√</td> <td data-bbox="1192 562 1253 722">√</td> <td data-bbox="1253 562 1315 722">√</td> <td data-bbox="1315 562 1377 722">√</td> <td data-bbox="1377 562 1435 722">√</td> </tr> <tr> <td data-bbox="553 722 932 940">2. Project outcomes: understanding of the topic, logical thinking and analysis, critical review and comments, interpretation and conclusions</td> <td data-bbox="932 722 1068 940">60</td> <td data-bbox="1068 722 1130 940">√</td> <td data-bbox="1130 722 1192 940">√</td> <td data-bbox="1192 722 1253 940">√</td> <td data-bbox="1253 722 1315 940">√</td> <td data-bbox="1315 722 1377 940">√</td> <td data-bbox="1377 722 1435 940">√</td> </tr> <tr> <td data-bbox="553 940 932 1100">3. Written report (organization, style, clarity, fluency, effectiveness, grammar and spelling)</td> <td data-bbox="932 940 1068 1100">15</td> <td data-bbox="1068 940 1130 1100">√</td> <td data-bbox="1130 940 1192 1100">√</td> <td data-bbox="1192 940 1253 1100">√</td> <td data-bbox="1253 940 1315 1100">√</td> <td data-bbox="1315 940 1377 1100">√</td> <td data-bbox="1377 940 1435 1100">√</td> </tr> <tr> <td data-bbox="553 1100 932 1192">4. Oral presentation and response to questions</td> <td data-bbox="932 1100 1068 1192">10</td> <td data-bbox="1068 1100 1130 1192">√</td> <td data-bbox="1130 1100 1192 1192">√</td> <td data-bbox="1192 1100 1253 1192">√</td> <td data-bbox="1253 1100 1315 1192">√</td> <td data-bbox="1315 1100 1377 1192">√</td> <td data-bbox="1377 1100 1435 1192">√</td> </tr> <tr> <td data-bbox="553 1192 932 1262">Total</td> <td data-bbox="932 1192 1068 1262">100 %</td> <td colspan="6" data-bbox="1068 1192 1435 1262"></td> </tr> </tbody> </table> <p data-bbox="553 1310 1435 1371">Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p data-bbox="553 1388 1435 1608">The performance of the student will be assessed during the course of the project. The project is assessed by the approach of work, achievement of proposed objectives, planning and execution of work, quantity and quality of reviewed information, interpretation and analysis of results and presentation of results. The student's ability to write essay report and present results orally in an effective, skilful and professional manner will be assessed based on the final written report and oral presentation.</p>								Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						1	2	3	4	5	6	1. Project preparation and efficient planning, organization, and execution of the project	15	√	√	√	√	√	√	2. Project outcomes: understanding of the topic, logical thinking and analysis, critical review and comments, interpretation and conclusions	60	√	√	√	√	√	√	3. Written report (organization, style, clarity, fluency, effectiveness, grammar and spelling)	15	√	√	√	√	√	√	4. Oral presentation and response to questions	10	√	√	√	√	√	√	Total	100 %						
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Reading List and References	
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