Subject Description Form

Subject Code	ABCT4113
Subject Title	Project
Credit Value	6
Level	4
Pre-requisite	Stage 1, 2 & 3 DSR core subjects
Objectives	The Project is related to work covered by the Course. The objectives of the Project are to promote independent and creative thought, and to train students to develop the academic and experimental skills to define, investigate, analyse and solve a scientific/technical problem.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: (a) conduct literature searches and critically assess the material; (b) demonstrate the ability in independent and creative thinking; (c) identify and solve technical problems; (d) formulate hypothesis, design and/or conduct studies as well as to analyze and interpret literature data and/or results; (e) appreciate the importance of team work when working within a team environment during a project; (f) manage time and organize efficiently; (g) communicate effectively, for report writing and presentation.
Subject Synopsis/ Indicative Syllabus	The Project involves a study on a fundamental or practical topic in applied biology and biotechnology. The study consists of literature survey and an experimental investigation. The project could be mechanistic studies on biological processes, development of methods/products/equipment, design and evaluation of bioprocesses, and feasibility study/survey on the marketing of biological products.
Teaching/Learning Methodology	The project may involve critical assessment, analysis and review of scientific information collected from the literature and internet on an assigned problem in biomedical field. The project may also include some field work or experimental study on selected topics to evaluate/confirm a research hypothesis. 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 conduct the literature review, propose his/her own topic of investigation and execute the experiments. 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. The project is assessed by the achievement of proposed objectives, planning and execution of work, interpretation and presentation of published scientific data.

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						
		a	b	c	d	e	f	g
1. Project preparation and efficient planning, organization and execution of the project	15	x	x		x	x		
2. Project outcomes: understanding of the topic, critical review and comments, execution of methods; results and data analysis; interpretation and conclusions	60	x	x	x		x		
3. Written report (organization, style, clarity, fluency, effectiveness, grammar and spelling)	15	x	x	x		x	x	x
4. Oral presentation and response to questions	10	x	x	x		x	x	x
Total	100 %							

Student Study Effort Expected

Class contact:	
▪ Literature review, project investigation	90 Hrs.
▪ Experimental investigation	90 Hrs.
Other student study effort:	
▪ Writing proposal and final report	64 Hrs.
▪ Preparing presentation	16 Hrs.
Total student study effort	260 Hrs.

Reading List and References

Related books and articles