BMS2301B: BIOMEDICAL RESEARCH – ROTATION PROJECT II (THEME B)

Effective Term
Semester A 2025/26

Part I Course Overview

Course Title
Biomedical Research – Rotation Project II (Theme B)

Subject Code
BMS - Biomedical Sciences
Course Number
2301B

Academic Unit
Biomedical Sciences (BMS)

College/School
College of Biomedicine (BD)

Course Duration
One Semester

Credit Units
1

Level
B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction
English

Medium of Assessment
English

Prerequisites
BMS1701A / BMS1701B / BMS1701C(The above-mentioned prerequisites are waived for Biological Sciences major students who were admitted from 2018 FYFD intake.)

Precursors
Nil

Equivalent Courses
Nil

Exclusive Courses
Nil

Additional Information
*Project theme to be advised by each semester

** The maximum number of registrations for the research rotation courses shall be limited to three times over the entire course of study. You are encouraged to work with different supervisors so as to gain different research experiences.

Part II Course Details

Abstract

This course BMS2301B is the second research rotation in a series of 3 courses (BMS2301A / BMS2301B / BMS2301C) for the 2nd year undergraduate students. This course aims to provide student an opportunity to gain research experience in a state of the art research laboratory at the University. In this course, students will do literature review and participate in research under a faculty member in the biomedical sciences department. They should discuss the research topic(s) with their assigned supervisor on a regular basis. At the end of the course, they will give an oral presentation and submit a report summarizing the learned research techniques and their research findings as part of the course requirement. After finishing this rotation, students are expected to gain sufficient knowledge and lab skills in different research areas and be well prepared for final year project in their 4th year of study.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Demonstrate the ability to master scientific research techniques, make scientific observations, ask specific questions and gather information		x	x	x
2	Criticizes the scientific literature and analyse the experimental data			x	
3	Design and carry out an laboratory based project		x	x	x
4	Evaluate the collected data and present it in both written and oral form			x	x

A1: Attitude
Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability
Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments
Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

	LTAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Literature study	Literature review involves critical reading and understanding on scientific articles.	1, 2	

2	Seminars/ Sharing sessions	Practice and refine one's own skills in discussions and sharing of ideas with others with confidence	1	
3	Student and Supervisor discussion	Regular discussion between student and supervisor on reviewing the progress of the research project, and give feedbacks to the students	1, 2	
4	Experimental/Bench work	Plan and perform experiments. Keep experimental record in a log book and submit to supervisor for assessment.	1, 3, 4	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("-" for nil entry)	Allow Use of GenAI?
1	Oral Presentation	1, 2, 3, 4	50	-	No
2	Summary Report	1, 2, 3, 4	50	-	No

Continuous Assessment (%)

100

Examination (%)

0

Examination Duration (Hours)

0

Minimum Continuous Assessment Passing Requirement (%)

0

Minimum Examination Passing Requirement (%)

0

Assessment Rubrics (AR)

Assessment Task

1. Oral Presentation

Criterion

Ability to explain the research conducted in detail and the quality of your oral presentation

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)
Basic

Failure (F)
Not even reaching marginal levels

Assessment Task
2. Summary Report

Criterion
Ability to explain the learned research techniques and the research conducted in detail and the quality of your written report

Excellent (A+, A, A-)
High

Good (B+, B, B-)
Significant

Fair (C+, C, C-)
Moderate

Marginal (D)
Basic

Failure (F)
Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

- Research rotation
- Literature review
- Biomedical sciences
- Cancer research
- Neuroscience
- Regeneration medicine
- Nano medicine
- Microbiology
- Genetics, epigenetics and genomics

Reading List

Compulsory Readings

	Title
1	The CityU library has a research guide arranged by subject department: http://libguides.library.cityu.edu.hk/
2	Pubmed http://www.ncbi.nlm.nih.gov/pubmed
3	Google Scholar:http://scholar.google.com

Additional Readings

	Title
1	Nil