

BIOS6906: RESEARCH INTERNSHIP PROJECT IN BIOSTATISTICS

Effective Term

Semester B 2025/26

Part I Course Overview

Course Title

Research Internship Project in Biostatistics

Subject Code

BIOS - Biostatistics

Course Number

6906

Academic Unit

Biostatistics (BIOS)

College/School

College of Computing (CC)

Course Duration

Two Semesters

Credit Units

0-6

Level

P5, P6 - Postgraduate Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Students must have completed at least 21 credit units, including all core courses, for the MScBIOS programme

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

BIOS6907

Additional Information

Nil

Part II Course Details

Abstract

This course provides students the opportunity to independently explore a biostatistics topic of their own interest. Through a research internship in the Greater Bay Area, including Hong Kong, or other approved locations, students work under the joint supervision of a CityUHK faculty member and an external industry/research supervisor* at the host organization. The course empowers students to enhance their biostatistics skills and knowledge, blending prior and concurrent coursework to address advanced challenges with effective, practical solutions. Students acquire hands-on experience, independently designing and resolving real-world biostatistical problems by applying or refining relevant theories and methods.

*If the internship is at CityUHK, an external industry or research supervisor is not required.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Identify and analyze a challenging biostatistical problem, reviewing existing solutions.	20	x	x	
2	Propose innovative solutions using or advancing biostatistics theories and methods.	25	x	x	
3	Develop and evaluate a working model or solution to address the problem.	25		x	x
4	Document and communicate the study process and findings through an oral presentation and a written report.	15		x	x
5	Apply skills independently and collaboratively, communicating effectively with supervisors.	15		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	Project Planning	Students will identify a challenging biostatistical problem and draft a project plan with clear, appropriate milestones to guide their investigation.	1	

2	Project Proposal	Students will analyze the identified biostatistical problem, research existing solutions, and, in consultation with supervisors, develop innovative designs or solutions.	2	
3	Project Implementation and Evaluation	Students will implement their proposed solutions, then test and evaluate the resulting model or solution to ensure it addresses the problem effectively.	3	
4	Project Documentation	Students will produce regular progress reports and a final report, culminating in an oral presentation and demonstration to document and communicate their project.	4	
5	Throughout the Internship Project	Students will maintain regular communication with supervisors, seeking guidance and support to complete the project independently and professionally.	5	

Additional Information for LTAs

The course is designed to guide students in proposing and managing their own projects. Each student will find a research supervisor at the host organization. The supervisor closely monitors progress via regular meetings, provides guidance, identifies issues early, sets assessment criteria, encourages innovation, and — for research internships — verifies internship authenticity, monitors progress, and confirms successful completion with a signed letter from the host organization.

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("- " for nil entry)	Allow Use of GenAI?
1	Project Proposal	1, 2, 3	15	-	Yes
2	Project Milestone Meetings	1, 2, 3, 4, 5	40	-	Yes
3	Oral Presentation	2, 3, 4, 5	25	-	Yes
4	Project Final Report	2, 3, 4, 5	20	-	Yes

Continuous Assessment (%)

100

Assessment Rubrics (AR)

Assessment Task

Project Proposal

Criterion

Problem-solving skills and application of biostatistical concepts

Pass (P)

Satisfactorily attaining the specified criteria

Failure (F)

Not even reaching marginal levels

Assessment Task

Project Milestone Meetings

Criterion

Problem-solving based on comprehensive understanding

Pass (P)

Satisfactorily attaining the specified criteria

Failure (F)

Not even reaching marginal levels

Assessment Task

Oral Presentation

Criterion

Problem-solving based on comprehensive understanding

Pass (P)

Satisfactorily attaining the specified criteria

Failure (F)

Not even reaching marginal levels

Assessment Task

Project Final Report

Criterion

Problem-solving based on comprehensive understanding

Pass (P)

Satisfactorily attaining the specified criteria

Failure (F)

Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

The project does not follow a fixed, formal syllabus. Each student is required to undertake an individual internship project.

Reading List

Compulsory Readings

Title	
1	NIL

Additional Readings

Title	
1	NIL