

Hong Kong Baptist University
Faculty of Science
Department of Mathematics

Title (Units): ORBS7231 Dissertation I (3,0,9)

Course Aims: This course guides students in the development of research methodology appropriate to the practice of Operational Research and Business Statistics, and gives students the opportunity to work on problems of Operational Research and Business Statistics that have real-world significance. Students are highly recommended to study on practical issues related to economic activity.

Prerequisite: No

Prepared by: Michael Ng

Remark: Students are supervised by staff of HKBU.

Course Intended Learning Outcomes (CILOs):

Upon successful completion of this course, students should be able to:

No.	Course Intended Learning Outcomes (CILOs)
1	Conduct in-depth literature review to obtain comprehensive knowledge of specific topic area
2	Evaluate and select appropriate research methodology
3	Plan, develop and carry out an independent research project
4	Apply operational research and business knowledge and techniques to formulate solutions for real-life problems
5	Present the project in written and oral format
6	Work independently

Teaching & Learning Activities (TLAs):

CILO	TLAs will include the following:
1,2,3,4,5,6	Dissertation writing and presentations to monitor both students' learning and mastering of the taught materials. In addition, common mistakes will also be addressed and analyzed.

Assessment:

No.	Assessment Methods	Weighting	CILO Addressed	Remarks
1	Continuous Assessment	20%	all	Each student is supervised by an academic staff, who will help the student formulate the principal question(s) of investigation, recommend relevant literature and suggest possible methodology. Student's progress is monitored regularly so as to identify any problem encountered in study and ensure he/she is likely to complete the project timely in a satisfactory manner. The assessment is based on the following areas: (i) Diligence and initiatives. (ii) Creativity. (iii) Skills.
2	Thesis	60%	all	It should include student's own account of investigations and findings, with a systematic and

				critical exposition of knowledge in literature. The student is also required to present materials coherently, with all the necessary references cited. The assessment is based on the following areas: (i) Literature survey and communication. (ii) Presentation. (iii) Results and discussion
3	Oral Presentation	20%	5,6	Each student is also assessed on the ability to communicate project aims, methodology and investigations/findings effectively. The assessment is based on the following areas: (i) Presentation. (ii) Communication. (iii) Questions and answers.

Remark: The final score will be calculated with the course ORBS7232 Dissertation II together.

(Approved by the Science Faculty Board Meeting by circulation in August 2024)

(Approved by the Department Management Committee on 7 August 2024)

(Approved by the Science Faculty Board Meeting 31 October 2023)

(Approved by the Department Management Committee on 5 September 2023)