Subject Code: BRE499

Level: 4

Contact Hours: L/T 22.5
Guided Study & PW: 184

Student Effort Hours: 320

Assessment Method: Coursework 100%

Credit Value: 8

Pre-requisites: Level 3 core subjects

Co-requisites: Nil

Exclusions: Nil

Subject Leader/Lecturer/Dept.: BRE Scheme

### DISSERTATION

**Subject Aim:**

This subject is intended to:

Encourage the student to take a critical and analytical view of an issue relevant to the construction and real estate industry and of particular concern to the Hong Kong and its neighbouring environments.

### Learning Outcomes:

*Students will demonstrate their ability to:-*

1. Produce a dissertation research proposal with researchable topic related to the field of construction and real estate, appropriate research method, and a display of literature review.
2. To complete a research leading to a dissertation.

**Notes:** ‘Research Methods’ is a major component leading to the learning and completion of Dissertation. Students **must complete** (i) all the assignments and tests of research methods and (ii) Dissertation on the prescribed submission date and **pass** both components i.e. Research Methods and Dissertation.

### Research Methods: Brief Syllabus Content

A. Concepts: Philosophy of sciences, theory, hypothesis, methodology, method, research objective, problem statement, classification of research, etc.

B. Process: Literature search and review, referencing and plagiarism, work plan, authorship skills, data assembly, time management, writing up, etc.

C. Qualitative research: strategy, approaches, methods, analysis, examples, limitations, etc.

D. Quantitative techniques: such as descriptive statistics, hypothesis testing, correlation and regression analysis, Analytic Hierarchy Process, Expected Value Model, and use of computer software to handle statistical problems, etc. (Remarks: Students are expected to learn these techniques in more details and many other relevant quantitative techniques by their own initiatives.)

E. Writing out a dissertation proposal.

### Learning and Teaching Approach (tasks and activities designed to achieve learning outcomes):

Lectures will be used to present concepts and principles of the various subject areas. Tutorial sessions will be used for discussion, problems solving and hands-on experience. Students are expected to discuss at tutorials with tutor(s) and complete written assignments. They will receive feedback from the tutor(s).

### Dissertation Learning and Teaching Approach (tasks and activities designed to achieve learning outcomes):

Academic leadership for the Dissertation is provided by the Dissertation Co-ordinator assisted by the supervisors who are BRE academic staff with research experience.

Students will identify a topic in the field of construction and real estate to study in depth in the final year. The Dissertations are grouped into a number of study areas within the research theme of the Department such as real estate investment and finance, land and construction economics, construction management and construction technology and science.

For BEM students will be advised to identify a topic in the field of Building Engineering and Management to study in depth in the final year. The topic should be engineering-oriented or engineering related area in construction. The Dissertations are grouped into a number of study areas within the research themes of the Department such as construction technology and science, production engineering, production & contract management, engineering economics, construction quality in engineering works, application of information technology in the building industry, engineering materials, etc.
Occasionally, if a student proposes a topic which is not within the context of engineering orientation, consideration and prior approval need to be sought from the BEM Programme Management Team.

Each student will work under the guidance of a supervisor and, if necessary, a second supervisor may be appointed to assist in project supervision. The project supervision is timetabled for one hour per two weeks over the final year, but students are expected to devote about a day per week of their own time to carry out study and research work.

**Students are encouraged to formulate a testable hypothesis with theoretical model or justifications; carry out an empirical test on the hypothesis; and draw inference(s) on research and practical implications from the findings.**

### Research Methods Coursework Assessment strategy

(assessment of student performance resulting from learning tasks):

The coursework mark will be based on short tests, assignments, seminar and discussion. The approach to coursework assessment is guided by two principles. First, the need to assess the extent to which the students have achieved the learning outcomes with respect to grading criteria. Second, the assessment itself should contribute in some way towards reflection and learning of the importance of research methods in Dissertation.

Half of the total coursework mark will be devoted to qualitative research methods (i.e. literature review and dissertation proposal). The other half will be based on quantitative (statistical) approaches (i.e. an empirical test on a hypothesis).

### Dissertation Assessment strategy

(assessment of student performance resulting from learning tasks):

The assessment of the Dissertation is based on students’ ability to develop and demonstrate the following attributes:-

(a) to critically evaluate information;
(b) to take person initiative and to think independently;
(c) to be able to identify the scope and limitation of collected data;
(d) to make value judgements; and
(e) to communicate clearly an argument and draw logical and substantiative conclusions.

The details of assessment procedures are outlined in Guidance notes for the presentation of the Final Year Dissertation.

### Reference List:

**Essential:**


HKPU Building and Real Estate Department (1999) *Guidance Notes for the Presentation of Final Year Dissertation*, HKPU, BRE


Lucey T. (1992) *Quantitative Techniques ELBS*


Leung, A.Y.T. and Yiu, C.Y. (eds), *Building Dilapidation and Rejuvenation in Hong Kong*, Hong Kong: Joint Imprint of CityU Press and the Hong Kong Institute of Surveyors.


**Recommended:**


**MS Excel Reference Manual**


Mustafa, M.A. and Ryan, T.C. (1990), Decision Support for Bid Evaluation, Project Management, 8(4), 230-235


**SPSS/PC Reference Manual**

**EViews 4.0 User’s Guide**

**Teaching activities:** Lecture (LT)/Tutorial (TU)/Seminar (SM)/Drawing (DW)/Laboratory or Practical (LB)/ Studio (ST)/Workshop (WS)/Project (PJ)/Field Study (FS)/Guided Study (GS)/Visit (VS)