



UNIVERSITI TEKNOLOGI MARA

BCM542: RESEARCH METHODOLOGY AND METHODS

Course Name (English)	RESEARCH METHODOLOGY AND METHODS APPROVED
Course Code	BCM542
MQF Credit	2
Course Description	The course provides the student with basic competencies to plan, conduct and analyse a research undertaking on a topic relevant to the construction industry. The competencies include what issues to consider when choosing research subjects, identifying research problems, how to use library resources to unearth the relevant literature, how to construct questionnaires and conduct surveys, how to select research design and use statistical and non-statistical data analysis techniques, discuss the findings, and provide a written report of the research conducted. This will help students to improve in terms of conceptual, analytical, decision making, problem solving, and communication skills. Students are evaluated based on individual and group research proposals, and quizzes
Transferable Skills	Communication, Planning, Analysis for researching
Teaching Methodologies	Lectures, Blended Learning
CLO	<p>CLO1 Demonstrate an understanding of the whole research process from the beginning in the selection of research topic, formulation of research questions to the reporting of research findings.</p> <p>CLO2 Identify suitable research method on proposed research topic or issue relevant to the construction industry.</p> <p>CLO3 Prepare a research proposal on relevant on research topic or issue relevant to the construction industry</p>
Pre-Requisite Courses	No course recommendations
Topics	
1. Introduction to Research 1.1) Research philosophy, theory and causality 1.2) Selecting a focus for a study 1.3) Identifying and selecting a research paradigm, either qualitative research (inductive approach) or quantitative research (deductive approach) or a combination of both (triangulation) 1.4) Type of research design for construction management research which includes: action research, ethnographic, surveys (cross sectional and longitudinal studies, experiments, grounded theory and etc.	
2. Developing Research Ideas 2.1) Sources of research ideas, developing research questions and sources of research information	
3. Problem Statements, Objectives and Hypotheses 3.1) Developing clear, right and important problem statement 3.2) Developing clear objectives and relevant to the problem statement 3.3) Developing relevant testable and resolvable hypotheses	
4. Reviewing the literature 4.1) The importance of literature review 4.2) The elements of literature review 4.3) Sources of research information, performing library search, reading research reports	
5. Methodology 5.1) Identifying research variable's and reliable research population Identifying measuring instruments 5.2) Precautions against likely sources of bias 5.3) Identifying limitation of research design 5.4) Choosing appropriate research methodology	

6. Analysis 6.1) Descriptive statistics and exploratory data analysis 6.2) Frequency distribution, descriptive or inferential statistics
7. Conclusion 7.1) Developing consistent conclusion 7.2) Identifying limitations of research 7.3) Presenting research recommendation
8. Presentation 8.1) Developing well-structured and appropriate writing style 8.2) Organizing and presenting data following standard format of referencing, i.e., Harvard System 8.3) Avoiding plagiarism and lazy writing

Assessment Breakdown		%
Continuous Assessment		100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Individual assignment	30%	CLO1 , CLO2
	Online Quiz	Minimum 3 online quizzes	30%	CLO1 , CLO2
	Written Report	Individual research proposal	40%	CLO1 , CLO2 , CLO3
		Assessment Briefing Timing Timing		

Reading List	Recommended Text	<ul style="list-style-type: none"> McQueen, R.A. and Knussen, C. 2002, <i>Research Methods for Social Science</i>, Pearson Education [ISBN: 013040456X] Murray, R 2011, <i>How To Write A Thesis</i>, McGraw-Hill Education (UK) [ISBN: 0335244289]
	Reference Book Resources	<ul style="list-style-type: none"> John W. Creswell 2013, <i>Research Design</i>, 4 Ed., SAGE London [ISBN: 1452226105] Fellows, R and Liu, A 2008, <i>Research Methods for Construction</i>, 3 Ed., Blackwell Oxford, UK [ISBN: 140517790X] Donald McBurney, Theresa White 2009, <i>Research Methods</i>, Cengage Learning [ISBN: 0495602191] Chris Hart 1998, <i>Doing a Literature Review</i>, SAGE [ISBN: 9780761959755] Samuel B. Green, Neil J. Salkind 2013, <i>Using SPSS for Windows and Macintosh</i>, 2 Ed., Pearson College Division [ISBN: 0205958605] Alan Bryman, Duncan Cramer 2001, <i>Quantitative Data Analysis with SPSS Release 10 for Windows</i>, Psychology Press [ISBN: 0415244005] Naoum, S.G. 2012, <i>Dissertation Research and Writing for Construction Students</i>, Routledge [ISBN: 0415538440]
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	