



UNIVERSITI TEKNOLOGI MARA

EDU545: Research Methodology for Educational Sciences

Course Name (English)	Research Methodology for Educational Sciences APPROVED
Course Code	EDU545
MQF Credit	4
Course Description	This course introduces students to the concepts and philosophies underlying the scientific nature of academic research. It aims at developing the students' understanding of research methodologies and their place in social science research. Students will also develop an understanding of the main research designs, data collection and analysis methods, and the actual conduct of research, including issues of ethics and access. Students will be in a position to define their research problem and draw up a proposal upon completion of this course.
Transferable Skills	Critical thinking problem Solving
Teaching Methodologies	Lectures, Blended Learning, Discussion, Presentation, Journal/Article Critique
CLO	CLO1 Describe the pertinent elements of an academic research CLO2 Synthesize the major sources of literature relevant to a given research issue CLO3 Explain the different research designs, data collection and analysis methods, and ethical considerations suitable for different types of research CLO4 Develop a research proposal for an academic research
Pre-Requisite Courses	No course recommendations
Topics	
1. 1. Introduction to Educational Research 1.1) a. Research as a scientific inquiry 1.2) b. An overview of basic and applied research 1.3) c. An overview of quantitative and qualitative research	
2. 2. Foundations of research 2.1) a. Research topic and research problem 2.2) b. Research objectives and questions 2.3) c. Steps in doing research	
3. 3. Literature review 3.1) Electronic databases	
4. 4. Research Designs 4.1) a. Survey (Descriptive) 4.2) b. Correlational 4.3) c. Experimental 4.4) d. Causal Comparative 4.5) e. Basic Qualitative Study 4.6) f. Case Study 4.7) g. Phenomenology 4.8) h. Ethnography 4.9) i. Historical 4.10) j. Action research	
5. 5. Population and Sampling 5.1) N/A	
6. 6. Variables 6.1) N/A	

7.7. Data collection instruments and methods 7.1) a. Questionnaires 7.2) b. Interview 7.3) c. Observation 7.4) d. Documents
8. Reliability and Validity 8.1) N/A
9. Ethics in research 9.1) N/A
10. Analysis of data 10.1) a. Quantitative data 10.2) b. Qualitative data
11. Writing 11.1) a. A research proposal 11.2) b. Citations and references

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	The chapter 2 of the research proposal comprises summary and syntheses of pertinent literature	10%	CLO2
	Individual Project	The development of proposal assesses students' ability to solve issues and collate the whole systematic process of research	40%	CLO4
	Journal/Article Critique	The AE review measures students' ability to evaluate and solve problems in a systematic manner in line with MQF 6 LOD	20%	CLO3
	Test	Tests 1 & 2 measure the understanding of the concepts and important elements in educational research.	30%	CLO1

Reading List	Recommended Text
	<ul style="list-style-type: none"> • Chua Yan Piaw (2016, <i>Mastering research methods</i>, 2 Ed., McGraw-Hill. Malaysia: • Creswell, J. W. (2014, <i>Research design: A qualitative, quantitative, and mixed methods approaches.</i>, 4 Ed., Lincoln: SAGE Publications, Incorporated

Article/Paper List	This Course does not have any article/paper resources

Other References	
	<ul style="list-style-type: none"> • n/a Creswell, J. W 2012, <i>Educational research: Planning, conducting, and evaluating quantitative and qualitative research</i> , New Jersey: Merrill Education • n/a Fraenkel, J. R., Wallen, N. E. & Hyun, H. H. 2012, <i>How to design and evaluate research in education.</i> (, New York: McGraw-Hill. • n/a Merriam, S. B. 2009, <i>Qualitative research: A guide to design and implementation</i> , San Francisco: Jossey-Bass. • n/a Parmjit Singh, Gurnam Kaur & Chan Yuen Fook 2006,). <i>A comprehensive guide to writing a research proposal.</i> , Malaysia: Venton. • n/a Yin, R.K. 2009, <i>Case Study Research: Design and Methods.</i> , California: Sage Inc