UNIVERSITI TEKNOLOGI MARA

MAE580: STATISTICS IN EDUCATION

Course Name (English)	STATISTICS IN EDUCATION APPROVED
Course Code	MAE580

MQF Credit	3

Course Description	The purpose of this course is to provide educators with basic knowledge of statistics and to assist them in acquiring skills and techniques for using, understanding and interpreting statistical procedures appropriate in a given situation. It is designed to prepare prospective teachers to teach statistics in the secondary school by blending instructional techniques and statistical concepts related to the teaching of statistics. Major areas to be covered include Descriptive and Inferential Statistics, and applications of SPSS as a tool in assisting data analysis and interpretation. Students will be given an opportunity to practice their acquired skills through research projects agreed upon by the course instructor. The focus of the course will be on developing conceptual understanding of statistics (not computations) and the application and interpretation of statistics in meaningful ways using examples from educational settings.

Transferable Skills	Statistical skills

Teaching Methodologies	Lectures, Lab Work, Project-based Learning

CLO	CLO1 Demonstrate basic statistical concepts and procedures CLO2 Apply appropriate statistical concepts and procedures in analyzing a body of data CLO3 Demonstrate and interpret data based on the analysis of data using SPSS CLO4 Display appropriate choices of statistical analyses with research questions

Pre-Requisite Courses	No course recommendations

Topics
1. Introduction to Statistics 1.1) N/A
2. Descriptive Statistics 2.1) N/A
3. Inferential Statistical Analysis 3.1) N/A
4. Introduction into SPSS 4.1) N/A
5. Analysing Descriptive Statistics using SPSS 5.1) N/A
6. Analysing Inferential Statistical Analysis using SPSS 6.1) N/A

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment				
	Assessment Type	**Assessment Description**	**% of Total Mark**	**CLO**
	Final Project	n/a	40%	CLO3
	Practical	n/a	20%	CLO4
	Test	n/a	20%	CLO1
	Test	n/a	20%	CLO2

Reading List	Recommended Text	• **Parmjit Singh 2009,** *Quantitative Data Analysis for Novice Researchers.***, Primera Kuala Lumpur** • **Agresti, A. 2018,** *An introduction to categorical data analysis***, Wiley** • **Cox, D. R. 2018,** *Analysis of binary data.***, Routledge.** • **Miller, R. L 2017,** *). SPSS for social scientists. Macmillan International Higher Education.* • **McCormick, K., Salcedo, J., & Poh, A 2015,** *SPSS statistics for dummies.***, John Wiley & Sons.** • **Ott, R. L., & Longnecker, M. T 2015,** *An introduction to statistical methods and data analysis.***, Nelson Education.** • **Bain, L.J & Englehardt, M. (1992,** *Introduction to Probability and Mathematical Statistics,***, Duxbury Press.** • **H. Halilah, I. Mohd. Said & Y. Fatimah (2002,** *Business Statistics, Shah Alam: UiTM***, Document Services Sdn. Bhd.** • **Kirk, R.E. 1990,** *Statistics: An Introduction***, Holt, reinhart and Winston, Inc.** • **Mendenhall, W. & Sincich, T. 1995,** *Statistics for Engineering and the Sciences***, New Jersey: Prentice Hall, Inc.**
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	