



FAKULTI PENGURUSAN DAN INDUSTRI HALAL

PROGRAM	Diploma in Technology Management
COURSE NAME	BUSINESS STATISTICS
COURSE CODE	DDWG 2213
CREDIT HOUR	3
SYNOPSIS	This course is design to expose the student the basic knowledge of statistics in the field of business. Besides that, it provides a rich depth of practical examples and application approach by using statistical techniques. This course will also emphasize topics on introduction and data collection, presenting data in tables and charts, numerical descriptive measures, basic probability, normal distribution, sampling distributions, fundamental of hypothesis testing: one sample tests; two-samples tests with numerical data, analysis of variance, tests for two or more samples with categorical data, simple regression and correlation and index numbers. At the end of the course, students should be able to solve problems related to business statistics.
COURSE STRUCTURE	
CHAPTER	TOPICS
1	INTRODUCTION AND DATA COLLECTION 1.1 Types of data 1.2 Fundamentals elements of a statistical analysis 1.3 Types of sampling methods 1.4 Collecting data, why data is needed, source of data
2	PRESENTATING DATA IN TABLES AND CHARTS 1.1 Organizing numerical data 1.2 Tables and charts for numerical data 1.3 Graphing bivariate numerical data 1.4 Tables and charts for a categorical data 1.5 Tabulating and graphing bivariate categorical data
3	NUMERICAL DESCRIPTIVE MEASURES 1.1 Measures of central tendency, variation and shape 1.2 Exploratory data analysis



	1.3 Obtaining descriptive summary measures from a population 1.4 The coefficient of variation
4	BASIC PROBABILITY 4.2 Basic probability 4.2 Concepts of conditional probability 4.3 B. Bayes' theorem
5	SAMPLING DISTRIBUTIONS 5.1 The unbiased property of the sample mean 5.2 Standard error of the mean 5.3 Sampling from normally and non-normally distributed populations 5.4 Sampling distribution of the proportion
6	FUNDAMENTALS OF HYPOTHESIS TESTING: ONE -SAMPLE TESTS 6.1 Hypothesis testing methodology 6.2 z test of the hypothesis for the mean and proportion 6.3 t test of hypothesis
7	TWO-SAMPLE HYPOTHESIS TESTS 7.1 Comparing two independent samples 7.2 Comparing two related samples
8	ANALYSIS OF VARIANCE (ANOVA) AND CHI-SQUARE TESTS 8.1 One-way analysis 8.2 Chi-square test for the differences in more than two proportions
9	SIMPLE REGRESSION AND CORRELATION 9.1 Describe the types of regression models 9.2 Compute the simple linear regression
10	INDEX NUMBERS 10.1 Compute the price index 10.2 Compute the aggregate price indexes and weighted aggregate price indexes



References:	<ol style="list-style-type: none">1. David M. Levine, Kathryn A. Szabat, David F. Stephan (2015). Business Statistics: A First Course. 7th Edition. Pearson Prentice Hall.
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