

Kathmandu University School of Management

BBA/ BBIS Course Syllabus

Course Title	STATISTICS I						
Course Code Number	MAS 131						
Credit Hours	3						
Course Objective							
Main Objective	The objective of the course is to provide participants with a clear understanding of the basic statistical concepts, techniques, and tools on describing data, numerical measures, probability, probability distribution, sampling and sampling distribution, and index numbers and to enable them in using these techniques for analyzing business decision problems.						
Enabling Objectives	After completion of all the learning units and the requirement of the course, students will be able to: • Describe and present the data in different form of diagrams and tables. • State, calculate and interpret the measures of central values and dispersions. • Explain, calculate and interpret the basic probability problems. • Explain, calculate and interpret the problems of probability distribution – Binomial, Poisson and normal. • State and use of sampling in the sample survey and calculate sample size and its relations with standard error. • Explain types of index number and calculate the index numbers.						
Learning Unit							
Learning Unit One Net Contact Hours -8 hrs	1. Introduction Statistics and its subdivision, Statistics and Data, Arranging data using the Data Array and Frequency Distribution, Constructing a Frequency Distribution, Graphing Frequency Distributions: Stem -and -Leaf Display, Histogram, Frequency Polygon, Ogives.						
Learning Unit Two Net Contact Hours - 10 hrs	2. Measures of central tendency and dispersion in frequency distribution Summary Statistics, Arithmetic Mean, Weighted Mean, Geometric Mean, Median, Mode, Dispersion, Ranges, Average Deviation Measures, Standard Deviation, Relative Dispersion: Coefficient of Variation.						
Learning Unit Three Net Contact Hours - 10 hrs	3. Probability Basic terminology in probability, Probabilities Rules, Probabilities under conditions of Statistical Independence, Probabilities under conditions of statistical dependence, Bayes' theorem.						
Learning Unit Four Net Contact Hours - 8 hrs	4. Probability distributions Introduction to Probability Distributions, Random Variables, Use of Expected Value in decision making, Binomial Distribution, Poisson Distribution, Normal Distribution, choosing the correct probability distribution.						
Learning Unit Five Net Contact Hours - 6 hrs	5. Sampling and sampling distribution Introduction to Sampling and types of sampling, sample versus census survey, Sampling Distributions, Central Limit Theorem, Relationship between Sample size and Standard error.						
Learning Unit Six Net Contact Hours 6 hrs	6. Index Numbers Introduction, Un-weighted aggregates index, Weighted aggregates index: Laspeyres method, Paasche method, Fisher method, fixed weight aggregate method, and average of relative method- for price, quantity and value indices. Issues in constructing and using index numbers.						
Total Contact Hours	48 hrs (excluding assessment and final examination)						
Basic Text	Richard I. Levin and David S. Rubin (1997), <i>Statistics for Management</i> , 7 th Edition, New Delhi: Prentice Hall of India.						
Reference Text	David M. Levine, Timothy C. Krehbiel, Mark L. Berenson, and P.K. Viswanathan ((2010), <i>Business statistics A FIRST COURSE</i> , 5 th Edition, New Delhi: Prentice Hall of India.						
Evaluation Scheme	<table> <tr> <td>In-Semester evaluation</td><td>50%</td></tr> <tr> <td>End-Semester evaluation</td><td>50%</td></tr> <tr> <td>Total</td><td>100%</td></tr> </table>	In-Semester evaluation	50%	End-Semester evaluation	50%	Total	100%
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