MAASAI MARA UNIVERSITY

STATISTICS SOCIETY DATA ANALYSIS TRAINING

NO	TOPIC	CONTENT	SOFTWARE
1	**DATA**	1. DATA ENTRY 2. DATA CODING 3. DATA CLEANING 4. PIVOT TABLE 5. DATA AGGREGATION 6. DATA RESTRUCTURING 7. SPLIT FILE 8. SELECT CASES 9. DATA TRANSFORMATION 10. MERGE DATABASES	SPSS & MS EXCEL
2	**DESCRIPTIVE STATISTICS**	1. MEASURES OF CENTRAL TENDENCY & DISPERSION 2. FREQUENCY TABLES 3. CONTIGENCY TABLES 4. CUSTOM TABLES	SPSS
3	**DATA PRESENTATION**	1. PIE CHART 2. BAR GRAPH 3. HISTOGRAM 4. STEM AND LEAF PLOT 5. BOX PLOT 6. SCATTER PLOT 7. NORMALITY TEST PLOTS 8. EQUALITY OF VARIANCE TEST PLOTS 9. CONTOUR PLOT 10. SURFACE PPLOT	MS EXCEL & MINITAB
4	**ASSUMPTION TEST**	1. NORMALITY TEST 2. LEVEN'S TEST 3. OUTLIER TEST 4. RELIABILITY TEST	SPSS
5	**MEAN & VARIANCE EQUALITY TEST**	1. PAIRED T-TEST 2. INDEPENDENT T-TEST 3. ONE WAY ANALYSIS OF VARIANCE 4. NORMALITY TEST 5. REPEATED ANALYSIS OF VARIANCE 6. TWO WAY ANALYSIS OF VARIANCE	SPSS & MINITAB
6	**TESTS OF ASSOCIATION**	1. CORRELATION ANALYSIS	SPSS & MINITAB

		2. SPEARMAN CORRELATION ANALYSIS 3. CHISQUARE TEST 4. PHI & CRAMER'S V TEST	
7	**NON PARAMETRIC TEST**	1. RUN TEST 2. ONE SAMPLE TEST 3. 2 INDEPENDENT SAMPLE TEST 4. K INDEPENDET SAMPLE TEST 5. 2 RELATED SAMPLE TEST 6. K RELATED SAMPLE TEST	SPSS
8	**REGRESSION ANALYSIS**	1. LINEAR REGRESSION ANALYSIS 2. LOGISTIC REGRESSION 3. POISSON REGRESSION 4. NON LINEAR REGRESSION 5. LEAST SQUARE REGRESSION 6. STRUCTURAL EQUATION MODEL	MINITAB & STATA
9	**DOE ANALYSIS**	1. COMPLETE RANDOMIZED DESIGN 2. CRBD 3. FACTORIAL DESIGN 4. NESTED DESIGN 5. SPLIT PLOT DESIGN 6. LATIN SQUARE DESIGN 7. PARTIAL BALANCE BLOCK DESIGN 8. RESPONSE SURFACE	R & MINITAB
10	**TIME SERIES ANALYSIS**	1. UNIT ROOT TEST 2. FITTING AR, MA AND ARMA 3. VAR FITTING 4. GRANGER CAUSALITY TEST 5. VARIANCE DECOMPOSISTION 6. IMPULSE RESPONSE TEST 7. COINTEGRATION TEST 8. ERROR CORRECTION MODELS 9. VOLATILITY MODELS	EVIEWS
11	**MULTIVARIATE ANALYSIS**	1. HOTELINGS T-TEST 2. MANOVA 3. PCA 4. CCA	PCORD
12	**QUALITY CONTROL**	1. X-BAR CHARTS 2. R-CHARTS 3. SIGMA – CHARTS	SPSS
13	**SURVIVAL ANALYSIS**	1. LIFE TABLES 2. KAPLAN MEIER 3. COX REGRESSION	SPSS

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