

# SOCW-703

1.	<b>Program</b>	BS Social Work	
2.	<b>Title</b>	Social Statistic & Computer Applications	
3.	<b>Semester</b>	7 <sup>th</sup>	
4.	<b>Code</b>	SOCW- 703	
5.	<b>Rating</b>	03 Credit Hours	
6.	<b>Objectives</b>	<p><b>Upon successful completion of this course, the students will be able to</b></p> <ol style="list-style-type: none"> <li>1 Explain basic concepts of social statistics;</li> <li>2 Summarize numeric data by computing descriptive statistics;</li> <li>3 Compute various inferential statistics;</li> <li>4 Test hypotheses applying probability theory;</li> <li>5 Use software for Data analysis.</li> </ol>	
7.	<b>Contents</b>	<b>Week</b>	<b>Contents</b>
		Week 1-2	<p><b>Introduction</b></p> <ul style="list-style-type: none"> <li>• Introduction to Statistics</li> <li>• Elementary concepts and notions</li> <li>• Meaning and definition of statistics</li> </ul>
		Week 3	<p><b>Statistics:</b></p> <ul style="list-style-type: none"> <li>• Descriptive and Inductive.</li> <li>• Measurement: Nominal</li> <li>• Ordinal and Interval scales.</li> <li>• Frequency Distribution:</li> <li>• Tabular Organization and Graphic Presentation of Data</li> </ul>
		Week 4-5-6	<p><b>Descriptive Measures</b></p> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• measures of central tendency</li> <li>• Different types of Averages</li> <li>• Quantiles,</li> <li>• Empirical Relation between Mean,</li> <li>• Median and mode,</li> <li>• Relative Merits and Demerits of various Averages,</li> <li>• properties of Good Average,</li> <li>• Box and Whisker Plot,</li> <li>• Stem and Leaf Display.</li> <li>• Measures of Dispersion,</li> <li>• coefficient of variation,</li> <li>• Bivariate data,</li> <li>• Linear correlation and Linear regression</li> </ul>
		Week 7-8	<p><b>Probability and Probability Distributions.</b></p> <ul style="list-style-type: none"> <li>• Basic concepts.</li> <li>• Rules of Probability.</li> <li>• Discrete and continuous distributions.</li> <li>• Binomial.</li> <li>• Poisson and Normal Distribution.</li> </ul>

		Week 9	<b>Mid-Term Exam</b>
		Week 10-11-12	<b>Sampling Distribution and Test of Hypothesis</b> <ul style="list-style-type: none"> <li>• Concept of sampling Distribution and standard error.</li> <li>• Sampling Distributions of Mean and proportion.</li> <li>• Hypothesis Testing about Population Mean and proportion.</li> <li>• Hypothesis test about difference between two population means and proportions.</li> </ul>
		Week 13-14	<ul style="list-style-type: none"> <li>• One way ANNOVA (Analysis of Variance)</li> <li>• Tables and Testing Equality of Means,</li> <li>• Chi Square test of Independence for contingency tables</li> </ul>
		Week 15	<b>Computer Application Statistical Package for Social Sciences (SPSS)</b> <ul style="list-style-type: none"> <li>• Introduction,</li> <li>• basic steps,</li> <li>• defining data,</li> <li>• data entry,</li> <li>• data transformation,</li> </ul>
		Week 16-17	<b>Computer Application</b> <ul style="list-style-type: none"> <li>• data analysis,</li> <li>• graphical (diagrammatic) presentation,</li> <li>• Statistical application using SPSS.</li> <li>• MS office ,</li> <li>• MS Word,</li> <li>• MS Excel,</li> <li>• Power point,</li> <li>• Browsing.</li> </ul>
		Week 18	<b>Final Term Exam</b>
8.	<b>Outcome</b>		
9.	<b>Recommended Books / Reference</b>	<p>Asthana, H. S., &amp; Bhushan, B. (2016). <i>Statistics for social sciences (with SPSS applications)</i>. London: PHI Learning Pvt. Ltd.</p> <p>Blossfeld, H. P., Hamerle, A., &amp; Mayer, K. U. (2014). <i>Event history analysis: Statistical theory and application in the social sciences</i>. Now York: Psychology Press.</p> <p>Cramer, D. (2003). <i>Fundamental statistics for social research: step-by-step calculations and computer techniques using SPSS for Windows</i>. London: Routledge.</p> <p>Dey, I. (2003). <i>Qualitative data analysis: A user friendly guide for social scientists</i>. London: Routledge.</p> <p>Fielding, J., Gilbert, N., &amp; Gilbert, G. N. (2006). <i>Understanding social statistics</i>.</p>	

London: Sage publications.

Healey, J. F. (2014). *Statistics: A tool for social research*. London: Cengage Learning.

Knoke, D., Bohrnstedt, G. W., & Mee, A. P. (2002). *Statistics for social data analysis*. Itasca, IL: FE Peacock Publishers.

Levin, J. (2006). *Elementary statistics in social research*. New Delhi: Pearson Education India.

Miller, D. C., & Salkind, N. J. (2002). *Handbook of research design and social measurement*. London: Sage publications.

Sirkin, R. M. (2005). *Statistics for the social sciences*. London: Sage publications.

Stevens, J. P. (2012). *Applied multivariate statistics for the social sciences*. London: Routledge.

Triola, M. F. (2006). *Elementary statistics*. Reading, MA: Pearson/Addison-Wesley.

Vogt, W. P., & Johnson, B. (2011). *Dictionary of statistics & methodology: A nontechnical guide for the social sciences*. London: Sage publications.

Wagner III, W. E. (Ed.). (2009). *Using SPSS for social statistics and research methods*. New York: Forge Press.

**Assessment Criteria**

<b>Requirements</b>	
Assignments/Quizzes/Project/Group Presentations	
Mid-Term Exam	
Final Term Exam	
Total	