

		Lecture Plan			
Name of the College: Government College of Arts, Science and Commerce. Sanquelim - Goa					
Name of Faculty: DR. GURUPRASAD RAMAKRISHNA NAIK			Subject: Economics		
Paper code: ECO 300 BASIC STATISTICS		Program: TYBA		Division:	
Academic year: 2026-2027		Semester: V		Total Lectures: 78	
Course Objectives: 1. To familiarize basic statistical concepts. 2. To learn the tools for analyzing data. 3. To understand the use of spreadsheets.					
Course Outcome: 1. To use and interpret Vital statistics. 2. To use and interpret Preliminary statistical graphical tools. 3. To use and interpret Summarize and explore data using spreadsheets. 4. To use and interpret Measures of association in spreadsheets.					
Student Learning Outcome: 1. Students will be able to use and interpret Vital statistics. 2. Students will be able to use and interpret Preliminary statistical graphical tools. 3. Students will be able to use and interpret Summarize and explore data using spreadsheets. 4. Students will be able to use and interpret Measures of association in spreadsheets.					

Month	Lecture From	Lecture To	No. of lectures allotted	Topic, Subtopic to be covered	Exercise/ Assignment	ICT Tools	Reference books
JUNE	19/06/2026	20/06/2026	2	Meaning, definition, nature, scope, importance of statistics, applications in economics and business	Meaning, definition, nature, scope, importance of statistics, applications in economics and business	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
	22/06/2026	27/06/2026	4	Statistics as the art and science of learning from data; statistical thinking; data-driven decision making	Statistics as the art and science of learning from data; statistical thinking; data-driven decision making	Power point presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
	29/06/2026	30/06/2026	4	Statistical questions; qualitative and quantitative data; discrete and continuous data; scales of measurement	Statistical questions; qualitative and quantitative data; discrete and continuous data; scales of measurement	Power point presentation/ Smart board	Agrawal A N & Agarwal M K (2019) Indian Economy: Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson EducationCo. Meerut, India

JULY	01/07/2026	04/07/2026	4	Population vs. sample, census vs. sampling, sources of data, introduction to statistical software and calculators	Population vs. sample, census vs. sampling, sources of data, introduction to statistical software and calculators	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
	06/07/2026	11/07/2026	4	Introduction to MS Excel/LibreOffice Calc, worksheets, data entry, formatting, basic formulas	Introduction to MS Excel/LibreOffice Calc, worksheets, data entry, formatting, basic formulas	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
	13/07/2026	18/07/2026	4	Frequency tables, bar diagrams, pie charts, histograms, frequency polygons	Frequency tables, bar diagrams, pie charts, histograms, frequency polygons	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
	20/07/2026	25/07/2026	4	Line graphs, scatter plots, box plots, stem-and-leaf plots, choosing appropriate graphs	Line graphs, scatter plots, box plots, stem-and-leaf plots, choosing appropriate graphs	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
	27/07/2026	31/07/2026	4	Common graphical errors, misleading graphs, interpretation of charts	Common graphical errors, misleading graphs, interpretation of charts	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B.

							(2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
AUGUST	01/08/2026	01/08/2026	4	Creating and interpreting graphs using spreadsheets	Creating and interpreting graphs using spreadsheets	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
	03/08/2026	08/08/2026	4	Arithmetic mean, median, mode, weighted mean, comparison of measures	Arithmetic mean, median, mode, weighted mean, comparison of measures	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
	10/08/2026	15/08/2026	4	Range, quartile deviation, mean deviation, variance, standard deviation, coefficient of variation	Range, quartile deviation, mean deviation, variance, standard deviation, coefficient of variation	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
	17/08/2026	22/08/2026	4	Quartiles, deciles, percentiles, z-scores, interpretation	Quartiles, deciles, percentiles, z-scores, interpretation	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th

							ed.). Pearson Education
	24/08/2026	29/08/2026	4	Using spreadsheet functions for descriptive statistics and interpretation	Using spreadsheet functions for descriptive statistics and interpretation	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
SEPTEMBER	01/09/2026	05/09/2026	4	Meaning of association, contingency, covariance, correlation, regression overview	Meaning of association, contingency, covariance, correlation, regression overview	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
	07/09/2026	12/09/2026	4	Contingency tables, cross-tabulation, interpretation of categorical relationships	Contingency tables, cross-tabulation, interpretation of categorical relationships	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
	21/09/2026	26/09/2026	4	Scatter diagrams, Pearson's correlation coefficient, interpretation, limitations	Scatter diagrams, Pearson's correlation coefficient, interpretation, limitations	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education

	28/09/2026	30/09/2026	4	Regression equation, estimation, prediction, assumptions, interpretation	Regression equation, estimation, prediction, assumptions, interpretation	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
OCTOBER	01/10/2026	03/10/2026	4	Spreadsheet functions, trendlines, regression output, forecasting	Spreadsheet functions, trendlines, regression output, forecasting	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
	05/10/2026	10/10/2026	4	Correlation vs. causation, spurious relationships, ethical use of statistics, interpretation of results	Correlation vs. causation, spurious relationships, ethical use of statistics, interpretation of results	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
	12/10/2026	17/10/2026	4	Complete analysis of a dataset using spreadsheets: graphs, descriptive statistics, correlation, regression, interpretation and revision	Complete analysis of a dataset using spreadsheets: graphs, descriptive statistics, correlation, regression, interpretation and revision	PowerPoint presentation/ Smart board	Agresti, A., Franklin, C., & Klingenberg, B. (2017). The Art and Science of Learning from Data (4th ed.). Pearson Education
Component		Max Marks					

Assessment Rubrics		
	ISA 1	10
	ISA 2	10
	ISA 3	10
	Project	
	Semester End Exam	80