Course Title	Introduction to Statistics				
Course Code	STAT105				
Course Type	Compulsory				
Level	Higher Diploma				
Year / Semester	1st Year / 2nd Semester				
Teacher's Name	Dr Sophia Kyriakou				
ECTS	4	Lectures / week	2	Laboratories / week	None
Course Purpose and Objectives	The course will provide the student with an understanding of business statistical tools and methods. Specifically, students will learn to describe data with descriptive statistics, to perform statistical analyses, to interpret the results of statistical analyses and to make inferences about the population.				
Learning Outcomes	Upon successful completion of this course, students are expected to: • Explain basic statistical concepts such as statistical collection, species characteristics, statistical series, tabular and graphical representation of data, measures of central tendency, dispersion and asymmetry, correlation and regression analysis. • Be able to apply knowledge to solve simple tasks using computer (MS Excel). • Be able to calculate basic statistical parameters (mean, measures of dispersion, correlation coefficient, indexes). • Interpret the meaning of the calculated statistical indicators. • Be able to select and apply the appropriate statistical method for solving practical problems.				
Prerequisites	None	Co-requisites	None		
Course Content	Themes to be discussed: What is Statistics? Graphical and Tabular Descriptive Techniques Numerical Descriptive Techniques Probability, Random variables, Discrete Probability Distributions (Binomial and Poisson Distributions), Continuous Probability Distributions (Normal Distribution) Introduction to Estimation and Hypothesis Testing				

	Inference about a Population mean Inference about Comparing Two Population means Analysis of Variance, Chi-Squared Test Simple Linear Regression and Correlation.
Teaching Methodology	Course topics are presented by a variety of teaching approaches including lectures, exercises, multimedia cases, homework case analysis and class presentations and discussions of assigned readings.
Bibliography	**Compulsory reading:** • Berenson, Mark L.(2020), Basic Business Statistics: Concepts and Applications,14th, Pearson- Prentice Hall,ISBN: 978-1-292-26503-2. **Additional reading:** • Levine,David M.(2016), Business Statistics: A First Course,7th, Pearson,ISBN: 978-1-292-09593-6.
Assessment	▪ Class participation 10% ▪ Assignments/Tests 20% ▪ Mid-term exam 20% ▪ Final exam 50%
Language	English