Course Title	Introduction to Statistics			
Course Code	STAT106			
Course Type	Theoretical			
Level	Diploma/Higher Diploma			
Year / Semester	1 <sup>st</sup> Year / 1 <sup>st</sup> Semester			
Teacher's Name	Kyriakou Sophia			
ECTS	4	Lectures / week	2	Laboratories / week
Course Purpose and Objectives	This course is an introductory course in statistics intended for students in a wide variety of areas of study. The primary goal of the course is to help students understand how the process of posing a question, collecting data relevant to that question, analysing data, and interpreting data can help them find answers to real problems.			
Learning Outcomes	<ul> <li>Upon completion, students are expected to:</li> <li>Be able to use statistical methods for organising and describing sets of data</li> <li>Understand the fundamentals of data distribution</li> <li>Gain familiarity with the estimation of central and distribution parameters</li> <li>Prepare statistical graphs, charts and tables</li> <li>Explain the reasoning of data collection</li> <li>Be able to apply segmentation of variables and data management</li> <li>Be able to use and interpret simple linear regression models and use them for predictions</li> </ul>			
Prerequisites	None	Requ	ired	
Course Content	<ul> <li>The course covers the following topics:</li> <li>Overview, types of data, uses and abuses of statistics</li> <li>Collecting Data</li> <li>Summarising data</li> <li>The concept of distribution</li> <li>Measures of central tendency</li> <li>Measures of Variation</li> <li>Parameters estimation</li> <li>Exploratory data analysis</li> <li>Graphic presentation</li> <li>Basic Probability</li> <li>The Normal Distribution</li> <li>Simple Linear Regression and predictions</li> </ul>			
Teaching Methodology	Teaching is made by means of lectures and class discussions. Students will hand-in home exercises which will be discussed in class.			
Bibliography	<ul> <li>Berenson, Mark L., Levine, David M. (2020), Basic Business Statistics: Concepts and Applications, Pearson, ISBN: 978-1-292- 26503-2.</li> </ul>			

Assessment	Attendance and Participation	10%		
	<ul> <li>Assignment</li> </ul>	10%		
	<ul> <li>Intermediate Written Examination</li> </ul>	30%		
	<ul> <li>Final Written Examination</li> </ul>	50%		
Language	English or Greek			