

<b>Academic subject:</b> Mathematics			
<b>Degree Class:</b> L38		<b>Degree Course:</b> Animal Science	
		<b>Academic Year:</b> 2020/2021	
		<b>Kind of class:</b> mandatory	
		<b>Year:</b> I	<b>Period:</b> I semester
		<b>ECTS: 6</b> divided into <b>ECTS lessons: 6</b> <b>ECTS</b> <b>exe/lab/tutor: 0</b>	
<b>Time management, hours, in-class study hours, out-of-class study hours</b> lesson: 48    exe/lab/tutor:0    in-class study: 0    out-of-class study: 102			
<b>Language:</b> Italian		<b>Compulsory Attendance:</b> Yes	
<b>Subject Teacher:</b> Mario Cinone		<b>Tel:</b> +390805443892 <b>e-mail:</b> mario.cinone@uniba.it	
		<b>Office:</b> Department of Emergency and Organs Transplantation  Room    Floor <b>1</b>	
		<b>Office days and hours:</b> Tuesday 2:30-4:30 p.m. Thursday 9:30-11:30 a.m.	
<b>Prerequisites:</b> Eligibility for Mathematics assessment tests (minimum knowledge" assessment).			
<b>Educational objectives:</b> The health technician, coordinated by a veterinarian, must know the scientific data to prepare the most effective treatment in the care of animals. This course will help the student to correctly program the data collection methodology, as well as their method of presentation and statistical analysis, aimed at preparing the degree thesis.			
<b>Expected learning outcomes (according to Dublin Descriptors)</b>		<p><b>Knowledge and understanding:</b> The student will learn the methods of analysis and interpretation of data in relation to the main health parameters.</p> <p><b>Applying knowledge and understanding:</b> The student will demonstrate knowledge of the basic concepts of statistics and the main descriptive and inferential statistical elaborations.</p> <p><b>Making judgements:</b> The course will make the student autonomous in processing the data that he will collect in carrying out his profession.</p> <p><b>Communication:</b> The student will learn the specific language that will allow him to interface with professionals in the sector.</p> <p><b>Lifelong learning skills:</b> The student will become autonomous in the management of the activities connected with the processing and analysis of the data collected in the field.</p>	
<b>Course program:</b> Statistics in the health professions. Methods of measurement and sampling. Data analysis and presentation. Clinical trials. Epidemiological studies. Descriptive statistics: measurements of central tendency and variability. Probability and normal curve. Sampling error. Average sample distribution. Confidence interval. Differences between means. Inferential Statistics: basis of Statistical Tests. Frequency analysis. Measurement of correlation and regression. Comparison of means. Analysis of variance. Fundamentals of Excel and SPSS software.			
<b>Teaching methods:</b> Lectures and exercises in statistical analysis.			
<b>Auxiliary teaching:</b> PC, Excel and SPSS programs.			

**Assessment methods:**

The assessment of knowledge takes place through an oral test or a multiple-choice quiz which, together with the applied physics test, contributes to the final outcome of the Mathematics and Physics exam.

**Bibliography:**

Fowler Jim, Jarvis Phil, Chevannes Mel Statistics for the health professions, EDISES editions by Corrado Magnani (2011);

Wayne W. Daniel, Chad L. Cross “Biostatistics” Edises third edition (2019).