Biometry 120 (BME 120)

Qualification	Undergraduate
Faculty	Faculty of Economic and Management Sciences
Module credits	16.00
Programmes	BSc Information and Knowledge Systems
	BSc Biochemistry
	BSc Biological Sciences
	BSc Biotechnology
	BSc Chemistry
	BSc Culinary Science
	BSc Ecology
	BSc Entomology
	BSc Environmental Sciences
	BSc Extended programme - Biological and Agricultural Sciences
	BSc Extended programme - Physical Sciences
	BSc Food Science
	BSc Genetics
	BSc Geography
	BSc Human Genetics
	BSc Human Physiology
	BSc Human Physiology, Genetics and Psychology
	BSc Medical Sciences
	BSc Meteorology
	BSc Microbiology
	BSc Nutrition
	BSc Plant Science
	BSc Zoology
	BScAgric Animal Science
	BScAgric Applied Plant and Soil Sciences

	BScAgric Plant Pathology
	BVSc
Service modules	Faculty of Engineering, Built Environment and Information Technology
	Faculty of Natural and Agricultural Sciences
	Faculty of Veterinary Science
Prerequisites	At least 4 (50-59%) in Mathematics in the Grade 12 examination, or at least 50% in both Statistics 113, 123
Contact time	1 practical per week, 4 lectures per week
Language of tuition	Module is presented in English
Department	Statistics
Period of presentation	Semester 2

Module content

Simple statistical analysis: Data collection and analysis: Samples, tabulation, graphical representation, describing location, spread and skewness. Introductory probability and distribution theory. Sampling distributions and the central limit theorem. Statistical inference: Basic principles, estimation and testing in the one- and two-sample cases (parametric and non-parametric). Introduction to experimental design. One- and twoway designs, randomised blocks. Multiple statistical analysis: Bivariate data sets: Curve fitting (linear and non-linear), growth curves. Statistical inference in the simple regression case. Categorical analysis: Testing goodness of fit and contingency tables. Multiple regression and correlation: Fitting and testing of models. Residual analysis. Computer literacy: Use of computer packages in data analysis and report writing.