Fire University of Warsaw, Poland
Faculty of Security Engineering and Civil Protection
Syllabus 2018 -

Descriptive Statistics

profile	general academics
degree	first degree
programme	ERASMUS
semester	1
part time / full time	full time
ECTS	3
coordinator	dr inż. Jan Bihałowicz

form of the activity: exercise

hours	15
prerequisites	
objectives	
methods	
own work	
basic literature	
supplementary literature	

contents	hours
Basic concepts of descriptive statistics. Stages of statistical research. Acquisition of statistical information from databases.	2
Methods of data representation. Parameters of statistical distributions, distributions of discrete and continuous variables.	4
Study of interdependence, correlation coefficients.	2
Linear regression. Curvilinear regression models, reduction of nonlinear relationships to linear ones.	2
Time series and forecasting of development trends. Statistical hypothesis testing, analysis of variance (ANOVA), principal component analysis (PCA).	4
Checking the knowledge of the theoretical part.	1

form of the activity: exercise

hours	15
prerequisites	

objectives	
methods	
own work	
basic literature	
supplementary literature	

contents	hours
Acquisition of data from publicly available databases. Preparation of data for analysis, processing, organization and integration, data validation methods.	4
Performing basic statistical calculations in computer programs. Analysis of variability in data sets - correlations, linear and non-linear relationships.	4
Formulating and testing statistical hypotheses on data.	4
Report preparation - learning how to write a report taking into account the accessibility of the data and editorial requirements	3