



GDYNIA MARITIME UNIVERSITY
Faculty of Management and Quality Science



Course: From accounting to finance – the basics of finance	Status: optional
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Semester	No. of weeks	No. of hours (weekly)			No. of hours (globally)			ECTS
		Lect.	Class	Lab.	Lect.	Class	Lab.	
	8						15	3

Lecturers: Descriptive Statistics with Excel

1. Introduction to statistics
definition of statistics; scope of statistics; population and sample; types of data: primary data, secondary data;
2. Presentation of data
classification: raw data and its classification, discrete frequency distribution, sturge's rule, continuous frequency distribution, inclusive and exclusive methods of classification, open end classes, cumulative frequency distribution and relative frequency distribution; graphical presentation of data: histogram, frequency curve, frequency polygon;
3. Measures of central tendency
arithmetic mean; geometric mean; harmonic mean; weighted mean; mode; median; quartiles; deciles; percentiles;
4. Measures of dispersion
concept of dispersion; range; quartile deviation; mean deviation; variance and standard deviation; measures of dispersion for comparison;
5. Skewness and Kurtosis
concept of skewness of frequency distribution; positive skewness; negative skewness; symmetric frequency distribution; concepts of kurtosis;
6. Correlation
concept of correlation between two variables; positive correlation; negative correlation; covariance between two variables; Pearson's coefficient of correlation; Spearman's rank correlation coefficient;
7. Regression
concept of regression; lines of regression; regression coefficient; mean residual sum of squares; explained and unexplained variation; coefficient of determination;

Criteria for assessment:

Laboratory: obtaining 51% of the points in the practical exam on computers

Literature:

1. Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., Cochran, J. J. (2020). Modern Business Statistics with Microsoft Excel, 7th edition, Cengage.
2. Nelson, S. L. (2022). Excel Data Analysis For Dummies, 5th edition, Wiley.
3. Schmuller, J. (2022). Statistical Analysis with Excel For Dummies, 5th edition, Wiley.