

Instructions to the project in Statistics

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Study program: International Business with Agrarian Commodities (FEM), EU (FESRD)

Practical lessons: Tuesdays 3.30p.m. – 6 p.m. (AS-06)

Wednesdays 1p.m. – 3.30p.m. (AS-01)

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Academic year: 2009/2010

General instructions to the project:

Please elaborate your projects (individual tasks) in MS Excel and copy your results with appropriate interpretations to MS Word. Bring me your project in MS Word (printed). Upload your calculations and the printed version to Moodle till **January 8, 2010**. You can work in pairs (i.e. a maximum of 2 persons for one project). Be prepared because I'll ask you questions about your project. You can obtain a maximum of 50 points for the project (full-score).

Databases

There are several external hyperlinks to online available databases in Moodle (either in Slovakia or abroad). Please, find at least two qualitative and two quantitative statistical attributes with **the minimum of 30 observations** for each statistical attribute.

Tasks for the project:

1. Sort your dataset by a qualitative statistical attribute (either pivot table or contingency table) and by a quantitative statistical attribute (either grouped or ungrouped frequency distribution). Please, interpret a chosen row of the final output table verbally.
2. Calculate the descriptive statistics of the chosen quantitative statistical attribute (measures of central tendency, location, variability, skewness, and kurtosis). Please, interpret all values in accordance with the quantitative statistical attribute.
3. Calculate point and interval estimate of mean, variance and standard deviation (sample size is your dataset). Develop both the 95% and 99% confidence intervals for the population mean to see what will change. Please, interpret all values in accordance with the quantitative statistical attribute.
4. Conduct any relevant hypothesis test in accordance with your dataset (it can be also ANOVA). Please, interpret all necessary values.
5. Develop an estimated regression equation for your dataset (simple linear regression). Please, interpret all values.

Thank you ☺

I wish you good luck!