\$u

Course: Biostatistics

Objectives: Develop knowledge on use of statistical methods and software to solve

problems that arise in public health and medicine researches.

Description: Scientific researches, especially in medicine and public health fields, require

statistical methods for data analysis (evidence based medicine). The basic concepts of statistics will be presented. Selected problems will be analysed by

means of statistical software (SAS, R, Statistica).

The main themes are the following:

- Descriptive statistics

- Probability distributions
- Point and interval estimation
- Hypothesis testing
- Basic categorical and continuous data analysis
- Analysis of Variance (ANOVA)
- Correlation and regression analysis

Literature: Riffenburgh R.H., Statistics in Medicine, 2005, Academic Press; 2nd ed.,

Munro B.H., Statistical Methods for Health Care Research, 2004, Lippincott

Williams & Wilkins; 5th ed.,

Teaching: case study /exercises

180 h

Examination: Practical examination

ECTS: 6

Person responsible: Michał Skrzypek

Assistant Professor, Department of Biostatistics

School of Public Health Medical University of Silesia

Katowice, Poland