

# Basics of statistics (5 ECTS) TILM3582

This intensive course is an elementary course for students that have no knowledge or just a little knowledge of statistics and statistical methods. It starts with terminology and descriptive methods like graphics and descriptive summing of data. Using simple examples of some probability distributions participants will be led to get understanding of sample distributions for different type of variables. And finally some basic statistical models will be introduced and used in practicals.

## TOPICS OF THE COURSE

- Terminology of statistics
- Different types of quantitative studies
- Types of variables
- Data matrix
- How to describe data with graphics, frequency tables and numbers?
- Basics of probability distributions, sample measures and statistical inference
- How to investigate associations and dependencies between variables?
- How to compare groups?
- How to interpret results?
- Good way of reporting results

## TEACHING METHODS AND EVALUATION

- Lectures and group assignments (12 h)
- Computer practicals (6 h)
- Active participation in practicals (pass/fail)

Exact times and placing of lectures and practicals will be published in the end of October ( December 2017, weeks 50-51)

## TEACHER

- Lecturer Jouko Katajisto

## LEARNING OUTCOMES

By the end of the course the student should be able to

- understand the basic principles of statistics;
- use suitable descriptive methods for different types of variables;
- Form simple statistical models and interpret the results

**REGISTRATION (starts at 8:00 1st November):**

Max 50 participants (in practicals)

via NettiOpsu