

# Institut de statistique

# STAT

STAT3220

Statistical consulting

[30h] 6 credits

This course is taught in the 1st and 2nd semester

**Teacher(s):** Bernadette Govaerts, Christian Ritter

Language: english

Level: 3rd cycle course

#### Aims

The participants in this course will acquire knowledge and skill in three areas:

- statistical analysis of real life data (from problem method),
- communication (discussion with clients, oral and written presentation of results),
- aspects of professionalism and ethical conduct (planning, cost, good practice)

To accomplish these objectives, the participants will work on two real life consulting projects and their evaluation provides the main part of their grade.

#### Main themes

- Exploratory data analysis and rendering of data by tables and graphs
- practical issues in data analysis (missing values, outliers, transformations)
- review of common statistical analysis methods (regression, ANOVA, multivariate analysis; choice depends on selected projects)
- communication with clients (project discussions, presentation of results, report writing)
- professional and ethical conduct (analysis plan and cost estimation, mutual responsibilities of statistician and client, truthful representation, guidelines for ethical conduct)
- practical problem solving in two real life cases coming from diverse application areas including medecine, psychology, engineering, agronomy and business ...

## Content and teaching methods

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For more information:

http://www.stat.ucl.ac.be/cours/stat3220/index.html http://www.stat.ucl.ac.be/cours/stat3220/index.html

### Other credits in programs

**STAT3DA** Diplôme d'études approfondies en statistique

STAT3DA/M Diplôme d'études approfondies en statistique (méthodologie de (6 credits)

la statistique)

STAT3DA/P diplôme d'études approfondies en statistique (pratique de la (6 credits) Mandatory

statistique)