Course Specifications
Valid in the academic year 2018-2019

Quantitative & Qualitative Data analysis and Reporting (B001306)

Course

Lecturers in academic year 2018-2019
Hardyns, Wim

RE23 lecturer-in-charge

Offered in the following programmes in 2018-2019
Bachelor of Science in Criminological Sciences

Course size
(nominal values; actual values may depend on programme)
Credits 5.0  Study time 150 h  Contact hrs 45.0 h

Course offerings and teaching methods in academic year 2018-2019
A (semester 1)  Dutch

Contact hrs

lecture 17.5 h
demonstration 10.0 h
guided self-study 5.0 h
group work 6.25 h
seminar: practical PC room classes 5.0 h

Teaching languages
Dutch

Keywords
Quantitative methods, SPSS, data-file, survey questions, variables, descriptive statistics, inferential statistics, tests of significance, correlation, regression analysis, reliability analysis, factor analysis.
Qualitative methods, NVIVO, qualitative data collection, interviews, document analysis, qualitative data management, encoding qualitative data, reporting qualitative results

Position of the course
The aim of this course is twofold. First, it seeks to teach students how they can process and analyze data, using real life data from both quantitative and qualitative research. The use of software can be a great added value in analyzing and organizing both quantitative and qualitative data. This is the second goal, where students are introduced to software packages designed to handle qualitative and quantitative data. The course prepares students to conduct an independent research, thus preparing them for hands-on research in their internship and master paper. The basic principles of data gathering, data input, coding, transformations on data, and analysis are covered in a practicum.

Contents
The following aspects of quantitative data processing are covered:
• Applying quantitative analysis techniques: executing statistical analyses and data transformations using the SPSS interface;
• Making an informed choice between univariate descriptive parameters;
• Making an informed choice between bivariate parameters: from crosstabs to correlation and regression;
• Tests of significance (t-test, chi-square, analysis of variance);
• Exploring the boundaries of bivariate statistics: multiple linear regression models, introduction to factor analysis;
• Creating scales and estimating their internal consistency.
The following aspects of qualitative data processing are covered:
• Preparation of qualitative research (creation of a checklist);
• Execution of qualitative research (in the form of an assignment);
• Examples of often used methods: interviews, document analysis, focus groups;
• Coding and analyzing qualitative data;

Contact hrs

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Credits 5.0

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5 A

(Approved)
• Practical problems often encountered when conducting qualitative research and their solution (trouble shooting).

Initial competences

Successful completion of the course Descriptive Statistics (first Bachelor in Criminology). Alternatively, students can also enroll if they have acquired the skills taught in Descriptive Statistics in another way. The contents of the first bachelor are reviewed in the first class, but considered to be acquired knowledge.

Final competences

1. Understanding the results of statistical analyses, interpret them and critically evaluate them.

2. Make informed decisions on the most appropriate statistical analysis taking into account the measurement level of variables.

3. Independently analyze a statistical model in SPSS.
4. Independently transform and recode variables in SPSS.
5. Translating research questions into a statistical model.
6. Interpretation of levels of significance and confidence intervals.
7. Independently conduct qualitative analyses.
8. Translating research questions into a qualitative research instrument.

9. Importing qualitative raw data into a software package.

10. Applying the different steps of qualitative research.
11. Independently create a qualitative dataset.
12. Independently code qualitative data.
13. Independently analyze and structure qualitative data.

14. Independently reflect and report on qualitative research findings.

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment.

Conditions for exam contract

This course unit cannot be taken via an exam contract.

Teaching methods

Guided self-study, demonstration, group work, lecture, seminar: practical PC room classes.

Extra information on the teaching methods

During the lectures, including plenary exercises, students are taught different modes of quantitative data analysis. These techniques of analysis are demonstrated through plenary exercises which are solved by the lecturer. Qualitative research methods are introduced through a lecture. Quantitative and qualitative techniques are taught through demonstrations. Activity of students is generally limited to listening, taking notes and imitating the demonstrated techniques.

Qualitative techniques are taught through a group task. This task is introduced in a separate time slot. The group task is an integral part of the final evaluation of the course.

During the seminar (PC room class), exercises are completed by students under the supervision of a lecturer in a PC room. The guided self-study consists of a number of guiding sessions and independent learning, in which the students acquire (part of) the knowledge of the course by his or her own efforts. It discerns itself from distance education because feedback moments and (collective or personal) contacts with the lecturer are scheduled. Such feedback moments apply to both the quantitative and the qualitative components of the course.

Learning materials and price

• Dutch syllabus “SPSS voor criminologen”. Offered by Top Copy - Docunet (Martelaarslaan 290, 9000 Gent). Estimated price: 25 Euros.
• Power points quantitative data analysis (in English): Using SPSS for intermediate quantitative analysis.
• Power points qualitative data analysis.
• Additional learning material (available at electronic learning platform Minerva).

(Approved)
Course content-related study coaching

Coaching occurs interactively through Minerva: Powerpoint presentations of the lectures, suggestions for literature, voluntary (additional) assignments, among other materials are made available to the students. During and after the lectures, students can ask questions either orally or in written form. It is recommended to make an appointment with the lecturer or course assistant if questions persist.

Evaluation methods

end-of-term evaluation and continuous assessment

Examination methods in case of periodic evaluation during the first examination period

Written examination

Examination methods in case of periodic evaluation during the second examination period

Written examination

Examination methods in case of permanent evaluation

Participation, assignment

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible

Extra information on the examination methods

• The written exam (combination of multiple-choice questions and open questions) (50%) relates to the quantitative components of the course and probes students’ skills in analyzing quantitative data as well as interpreting and reporting research findings.

• The group assignment (50%) relates to the collection, analysis and reporting of qualitative data.

Calculation of the examination mark

A combination of non-periodical evaluation (group work – qualitative data processing, i.e. 50% of the final mark) and periodical evaluation (written exam – quantitative data processing, i.e. 50% of the final mark).

Regarding the group assignment for qualitative data processing: If there is clearly a different input from different group members, then the final mark per student belonging to the same group can still differ.

Students who eschew one or more parts of the evaluation can no longer pass the course. In that case, final scores of 8/20 and above will be reduced to the highest non-deliberative quotation (i.e. 7/20).

When the student attends all parts of the evaluation, but scores less than 10/20 for one of the components, he/she can no longer pass the entire course unit. If, in that case, the total score is a mark of 10/20 or above, then this is reduced to the highest failing mark (i.e. 9/20).

The partial score for the individual components are not rounded in the calculation of the total score. Only the total score is a rounded mark, in accordance with the rounding rules from the OER. For both components, students have to achieve at least 50 percent (i.e. 10/20). This means that, in an exceptional case, a score of 9.99/20 means that the student did not pass the individual component and, hence, did not pass the entire course unit.

Facilities for Working Students

The opportunity to make an individual assignment instead of a group assignment for qualitative data processing. Theretofore, the work student contacts the responsible lecturer. All components of the assignment will be maintained, however, the size of each respective component may be abridged. In order to hold this individual arrangement the enrolment for the course as work student need to be given in evidence. Individual explanation with respect to the practical assignment or other questions (such as questions about the material for the examination) can be arranged.
during flexible hours (provided proper arrangements with responsible lecturer or assistant). Content and size of the examination is the same as for all other students.