Course Specifications
Valid as from the academic year 2018-2019

Statistics (K001015)

Course size
(nominal values; actual values may depend on programme)

<table>
<thead>
<tr>
<th>Credits</th>
<th>Study time</th>
<th>Contact hrs</th>
</tr>
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<tbody>
<tr>
<td>3.0</td>
<td>90 h</td>
<td>30.0 h</td>
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</tbody>
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Course offerings and teaching methods in academic year 2018-2019

A (semester 1) Dutch

- guided self-study: 2.5 h
- lecture: 12.5 h
- seminar: coached exercises: 15.0 h

Lecturers in academic year 2018-2019

Lievens, John PS04 lecturer-in-charge

Offered in the following programmes in 2018-2019

<table>
<thead>
<tr>
<th>Programme</th>
<th>crds</th>
<th>offering</th>
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</thead>
<tbody>
<tr>
<td>Linking Course Master of Science in Political</td>
<td>3</td>
<td>A</td>
</tr>
<tr>
<td>Science (main subject International Politics)</td>
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<tr>
<td>Linking Course Master of Science in Political</td>
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<tr>
<td>Linking Course Master of Science in EU-Studies</td>
<td>3</td>
<td>A</td>
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<tr>
<td>Preparatory Course Master of Science in Political</td>
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Teaching languages

Dutch

Keywords

Statistics in the social sciences, applied statistics, quantitative methods, descriptive statistics, inductive (inferential) statistics

Position of the course

This course offers an introduction to the basic principles of statistics in the social sciences. Quantitative research is one of the main tools a social scientist has to observe society. Population and survey data provide insight into social phenomena, trends and social change. Descriptive statistics offers tools to synthesize large quantities of information in a systematic and scientifically sound manner. Inductive statistics provide the method to draw conclusions about an entire population out of data acquired from a (correctly drawn) sample. The main objective of this course is to train students to become informed and critical users of simple statistical techniques. The knowledge, insights and skills acquired here will serve, in the coming years, as a basis for further learning of more advanced statistical techniques and models.

This course contains a selection of the learning content of the course Statistics in the regular program of Bachelor in the Political Sciences. More specifically, it is limited to descriptive statistics. The part inferential statistics does not belong to the content of this reduced course.

Contents

- Introduction
- Statistics in social science research
- Measuring, statistical units, variables, measurement levels, data matrix
- Descriptive statistics
- Description of univariate distributions: frequency distributions, graphical representations, measures for centrality, dispersion and form

(Approved)
- Theoretical distributions, normal distribution
- Description of the association between two variables, bivariate statistics: cross tabulation, scatterplots, measures of association, correlation and regression analysis
- Statistical control: relationships between more than two variables

Initial competences

*Recommended*

Learning outcomes secondary education. Four hours of maths in the final years of secondary education provides a sufficient starting level. A website with the required prior knowledge of mathematics is available enabling students with insufficient mathematical skills to update their knowledge.

Final competences

1. To have insight in the possibilities and limitations of quantitative analyses for social-scientific research.
2. To understand and to be able to correctly interpret and critically assess published statistical analyses.
3. To be able to make a well-considered choice from the different statistical techniques in order to answer a scientific research question in a solid, sound manner.
4. To be able to correctly calculate and interpret statistical measures.
5. To recognize the advantages and the limitations of the different statistical measures.
6. To become a critical and responsible user of statistics.

Conditions for credit contract

Access to this course unit via a credit contract is unrestricted: the student takes into consideration the conditions mentioned in ‘Starting Competences’

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

- Guided self-study, lecture, seminar: coached exercises

Extra information on the teaching methods

- 

Learning materials and price

  Geraamde totaalprijs: 20 euro

References

- 

Course content-related study coaching

- e-learning through Minerva: FAQ, interactive exercises, interactive demonstrations, example of exams, prior knowledge of mathematics
- Individual guidance during office hours
- Support from the Faculty’s Tutoring Service (Monitoraat)

Evaluation methods

- end-of-term evaluation

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

- Written examination with multiple choice questions

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

- Written examination with multiple choice questions

Examination methods in case of permanent evaluation

Possibilities of retake in case of permanent evaluation

- Examination during the second examination period is possible

Extra information on the examination methods

- Emphasis lies on insight- and application-focused questions

Calculation of the examination mark

- Periodic evaluation (100%).

Facilities for Working Students

- Possible rescheduling of the examination to a different time.
- Alternative time for feedback is possible.

(Approved)