Course Specifications
Valid as from the academic year 2018-2019

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

<table>
<thead>
<tr>
<th>Credits</th>
<th>Study time</th>
<th>Contact hrs</th>
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<tbody>
<tr>
<td>7.0</td>
<td>210 h</td>
<td>45.0 h</td>
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Course offerings and teaching methods in academic year 2018-2019

A (semester 1) Dutch
lecture 30.0 h
seminar: coached exercises 15.0 h
guided self-study 5.0 h

Lecturers in academic year 2018-2019
De Neve, Jan PP01 lecturer-in-charge

Offered in the following programmes in 2018-2019

| Bachelor of Science in Psychology (main subject Clinical Psychology) | 7 | A |
| Bachelor of Science in Educational Sciences (main subject Clinical Special Needs Education and Disability Studies) | 7 | A |
| Bachelor of Science in Educational Sciences (main subject Pedagogy and Educational Sciences) | 7 | A |
| Bachelor of Science in Psychology (main subject Personnel Management and Industrial Psychology) | 7 | A |
| Bachelor of Science in Educational Sciences (main subject Social Work and Social Welfare Studies) | 7 | A |
| Bachelor of Science in Psychology (main subject Theoretical and Experimental Psychology) | 7 | A |
| Joint Section Bachelor of Science in Educational Sciences | 7 | A |
| Joint Section Bachelor of Science in Psychology | 7 | A |
| Linking Course Master of Science in Psychology (main subject Clinical Psychology) | 7 | A |
| Linking Course Master of Science in Educational Sciences (main subject Clinical Special Needs Education and Disability Studies) | 7 | A |
| Linking Course Master of Science in Educational Sciences (main subject Pedagogy and Educational Sciences) | 7 | A |
| Linking Course Master of Science in Psychology (main subject Personnel Management and Industrial Psychology) | 7 | A |
| Linking Course Master of Science in Psychology (main subject Teacher Education and Training) | 7 | A |
| Linking Course Master of Science in Psychology (main subject Theoretical and Experimental Psychology) | 7 | A |
| Linking Course Master of Science in Social Work and Social Welfare Studies | 7 | A |
| Preparatory Course Master of Science in Psychology (main subject Clinical Psychology) | 7 | A |
| Preparatory Course Master of Science in Educational Sciences (main subject Clinical Special Needs Education and Disability Studies) | 7 | A |
| Preparatory Course Master of Science in Educational Sciences (main subject Pedagogy and Educational Sciences) | 7 | A |
| Preparatory Course Master of Science in Psychology (main subject Personnel Management and Industrial Psychology) | 7 | A |
| Preparatory Course Master of Science in Psychology (main subject Teacher Education and Training) | 7 | A |
| Preparatory Course Master of Science in Psychology (main subject Theoretical and Experimental Psychology) | 7 | A |

Contact hrs Study time 210 h Credits 7.0 (nominal values; actual values may depend on programme)
Teaching languages
Dutch

Keywords
statistics, methodology, data analysis

Position of the course
This comprehensive course adds to the education curriculum on research competences within the programmes of Psychology and Educational Sciences. The aim is to obtain knowledge on and insight into methodological and data-analytical aspects of empirical scientific research. This course helps building competences that enable to independently and critically study empirical research in the domain and to actively conduct or participate in empirical research, for example within the context of the master's dissertation.

Contents
In this course the following topics are discussed:
• methodological aspects of research
• introduction to measurement theory
• descriptive statistics
• measures of association
• probability theory
• probability distributions
• estimation theory
• point estimation
• interval estimation
• statistical tests
• interpretation of R statistical software

Initial competences

Final competences
1 Know and use statistical techniques.
2 Have insight into the role of statistics within the behavioural sciences.
3 Have insight into the statistical information gathering, statistical analyses and statistical conclusions.
4 Appreciate statistical uncertainty.
5 Critically evaluate research that makes use of statistical techniques.
6 Critically apply statistical methods.
7 Translate research questions from the behavioural sciences to statistical hypotheses.
8 Relate statistical research results to the original research question.

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
Access to this course unit via an exam contract is unrestricted

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

Extra information on the teaching methods
The course consists of lectures, seminars and online learning paths/exercises.

Learning materials and price
• Syllabus published by the department and available for free on Minerva.
• Exercises (assignments and solutions) published by the department and available for free on Minerva.
Estimated cost printed version: €10

References
• Crawley, M.J. (2010). Statistics - an introduction using R.

Course content-related study coaching
'support via Minerva', 'by appointment'

Evaluation methods

(Approved)
end-of-term evaluation and continuous assessment

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
  Participation

Possibilities of retake in case of permanent evaluation
  Examination during the second examination period is possible in modified form

Extra information on the examination methods
  Permanent evaluation consists of passing learning paths/exercises (both online), see "Calculation of the examination mark" for details.

Calculation of the examination mark
  The permanent evaluation accounts for 5% (1/20) and the periodic evaluation accounts for 95% (19/20). Students that do not pass the permanent evaluation receive a mark of 0/1. Passing the permanent evaluation means going through all the learning paths/exercises on time and obtaining a minimum score of 80% for each learning path/exercise. A learning path/exercise can be made several times during a time period of at least one week. For the second exam opportunity, the marks of the permanent evaluation do not longer hold and the periodic evaluation accounts for 100% (20/20).