STK120 Statistics: Basic course 2 Regression Analysis, 7.5 credits

Statistik: Grundkurs 2 Regressionsanalys, 7,5 högskolepoäng

First Cycle

Confirmation

This course syllabus was confirmed by Department of Economics on 2020-12-10 and was last revised on 2024-03-15 to be valid from 2024-09-02, autumn semester of 2024.

Field of education: Social Sciences 100%
Department: Department of Economics

Position in the educational system

STK120 is a 7.5 credits course in statistics within the first-cycle level.

The course can be part of the following programmes: 1) European Studies Program (S1EUR), 2) Bachelor's Programme in Logistic management (S1LOG), 3) Program in Environmental Social Science (S1SMI) and 4) Program in Political Science (S1STV)

Main field of studies	*Specialization*
Statistics	G1F, First cycle, has less than 60 credits in first-cycle course/s as entry requirements

Entry requirements

Admission to STK120 requires previous knowledge of a minimum of 7.5 credits in Statistics or the equivalent.

Learning outcomes

On successful completion of the course the student will be able to:

1. Understand the functioning and use of fundamental methods for analysis of associations between two or more variables .
2. Interpret and understand the parameters of basic regression models.
3. Use relevant methods for analysis of association in practical situations, which

        includes interpreting their results
4. Perform simple analysis of association using relevant software for data management and analysis.

How overall learning goals for the bachelor's degree are related to the learning outcomes of the course:

Overall learning goals	Learning goals
Knowledge and understanding	1, 2, 3. 4
Skills and abilities	3, 4
Judgement and approach	3

Course content

Analysing the associations between two or more variables is central to understanding how the change in one variable affects other variables. Equally important is the understanding of in which cases one change cannot be said to result in any change in other variables, and understanding what is required in order to be able to say anything about these associations.

In this course, the student will learn the basics of analysis of association in order to be able to describe associations, understand the difference between correlation and causality, as well as making forecasts/predictions. The practical work is central to this course, as well as understanding what the statistical results really mean.

This course builds on basic statistical knowledge and the student is strongly recommended to repeat terms and concepts from earlier courses, such as STK110.

Form of teaching

The course content is presented at lectures, as well as through students own work on hand-ins and supervision of the work on these hand-ins

Language of instruction: English and Swedish

Assessment

Assessment is done by a written exam and written hand-ins.

The written hand-ins are compulsory and all must therefore be given a passing grade during the same course session for grades to be registered. The written hand-ins also earn points that count towards the course grade but cannot be used to improve the result of the written exam.

Passing grades on the written hand-ins can be used for later course sessions, but bonus points only apply during one course session and cannot be saved for later course sessions. If the student wishes, it is allowed but not a requirement to do the written

hand-ins on a later course session, but not after the course grade has been registered.

During the Spring Semester, the re-examination may, for administrative reasons, take place more than two months after the ordinary examination.

A student who has taken two exams in a course or part of a course without obtaining a pass grade is entitled to the nomination of another examiner. The student needs to contact the department for a new examiner, preferably in writing, and this should be approved by the department unless there are special reasons to the contrary (Chapter 6 Section 22 of the Higher Education Ordinance).

If a student has received a recommendation from the University of Gothenburg for special educational support, where it is compatible with the learning outcomes of the course and provided that no unreasonable resources are required, the examiner may decide to allow the student to sit an adjusted exam or alternative form of assessment.

In the event that a course has ceased or undergone major changes, students are to be guaranteed at least three examination sessions (including the ordinary examination session) over a period of at least one year, but no more than two years, after the course has ceased/been changed. The same applies to placements and professional placements (VFU), although this is restricted to just one additional examination session.

Grades

The grading scale comprises: Excellent (A), Very good (B), Good (C), Satisfactory (D), Sufficient (E) and Fail (F).

Course evaluation

Course evaluation is done digitally and anonymously at the end of the course.

The survey material is compiled and the results from the course evaluation and proposals for possible improvement measures are discussed at the course committee meeting. After the course evaluation is completed, the result will be published at the course homepage.

If a change of course is done based on the course evaluation, this will be communicated at the course introduction for the upcoming student group.

Additional information

Limitations: The course may not be included in the same degree as the courses EKS102, STK102, STK100, STK175, STG170, STG175 or STG160.