

Syllabus

for course at advanced level

Event-History Analysis: Regression for Longitudinal Event Data
Livsförloppsanalys: Regression för longitudinell händelsedata

**7.5 Higher Education
Credits**
7.5 ECTS credits

Course code:	SO7133
Valid from:	Autumn 2018
Date of approval:	2016-10-25
Changed:	2018-08-28
Department	Department of Sociology
Main field:	Demography
Specialisation:	A1F - Second cycle, has second-cycle course/s as entry requirements

Decision

This syllabus was approved by the board of the Department of Sociology, Stockholm University, 2018-08-28

Prerequisites and special admittance requirements

Bachelor's Degree, English 6 and Quantitative Methods in the Social Science 1 or equivalent.

Course structure

Examination code	Name	Higher Education Credits
1D21	Event-History Analysis	7.5

Course content

This course is an introduction to event-history analysis (also known as survival analysis, hazard regression, intensity regression, or duration data analysis). Duration data is commonly used to address many research questions in demography, social sciences, and epidemiology. Examples of such questions are: Which factors influence how long people live, how long they stay unemployed, or when do they start a family? This course introduces the techniques for analyzing such questions and data and covers univariate and basic multivariate (regression) methods for analysis of duration (event-history) data. Students also learn data management skills that are specific to conducting event-history analysis in Stata.

Learning outcomes

Expected learning results

By the end of the course, students should be able to:

- Describe the basic concepts of event-history analysis
- Understand the link between event-history analysis, basic demographic methods and regression analysis
- Recognize the type of research questions for which event history analysis would be a suitable method
- Interpret studies that have used basic event-history methods
- Reflect on the assumptions, problems and limitations of event-history methods

Using Stata:

- Transform data into the basic data layout of event history analysis
- Analyze time-dependent univariate and multivariate relationships
- Specify appropriate regression models using time-constant and time-varying

explanatory variables

- Interpret results obtained and communicate them to experts and non-experts alike.

Education

Coursework and examination consist of lectures, research output from demographic studies, and computer-based exercises. The exercises are done with Stata and statistical package using data from the European Social Survey .

Forms of examination

Examination is based on active participation including a short study presentation, computer exercises, and a take-home exam. Students are graded according to 15 separate evaluations (specified below), and each is graded Fail (0 points), Pass (1 point), Good (2 points).

Participation (1. – 2.) is evaluated by the student's attendance in lectures and computer exercises, including discussion of the assigned readings (1.) and a brief oral presentation of a particular research question that can be addressed with event-history analysis (2.).

Each of the five computer exercises is evaluated (3. – 7.). The computer exercises should include proper solutions to the assigned problems and clear presentations of the Stata-syntax ("do-files") and the output.

The take-home exam (8. – 15.) consists of a small independent study using event-history analysis with data provided by the instructors. The following aspects are evaluated:

8. Argument for research question and choice of data and method

9. Data description, manipulation and variable construction)

10. Stata-syntax ("do-files") that are clear and easy to follow

11. Descriptive analyses

12. Appropriate model specification for multivariate analysis

13. Execution of multivariate analysis

14. Presentation of results

15. Interpretation of results (including limitations)

The maximum number of points a student can attain is 30. In addition, extraordinary performance in any of the aspects can be rewarded with up to 2 extra points that can compensate for any shortcomings.

The final course grade is based on the following criteria:

A (Excellent) = 28-30 points

B (Very good) = 25-27 points

C (Good) = 22-24 points

D (Satisfactory) = 19-21 points

E (Sufficient) = 15-18 points

Fx (Insufficient) = Fail for one or two of the aspects specified above

F (Fail) = Fail more than two

Students with grade Fx or F at an exam are entitled to take another exam as long as the course is provided in order to obtain grade E at least. A student with E or higher is not entitled to another examination to raise the grade. Students who received grade Fx or F on exams twice from the same examiner can request to have another examiner. Such request should be sent to the Director of Studies.

Examination takes place during the course and at the end of the course. All course work must be submitted no later than one week after completion of the course to be examined during the current course. If a student fails to meet this deadline or leaves at least one task with significant errors that must be resubmitted, examination will take place in connection with the course being given the next semester or at the reexamination.

Plagiarism, cheating and unauthorized cooperation

It is the responsibility of the student to be familiar with the rules for examination. Detailed information is available at Stockholm University's website www.su.se/regelboken. Teachers are obliged to report suspicion of cheating and plagiarism to the Director of Studies and the Disciplinary Board. An example of plagiarism is to formally or almost verbatim copy a text (even a single sentence) without indicating where this comes from. This also applies to texts you have previously written (self-plagiarism). Study groups are encouraged, but when it comes to individual course work, students must take care to submit independent work and not unauthorized cooperation.

Interim

Students may request that examination according to this syllabus be completed up to three semesters after it

expires. The request is to be directed to the Director of Studies.

Limitations

You can not be admitted to this course if you have passing grade in SO7130 Advanced Demographic Methods 1: An Introduction to Event-History Analysis 7.5 credits or SO7131 Advanced Demographic Methods 1: An Introduction to Event-History Analysis 10.5 credits, or the module 1M31 Introduction to Event-History Analysis within SO8040.

Required reading

Current literature list is available no later than two months before the start of the course.