

STOCKHOLM UNIVERSITY

Department of Sociology



## Syllabus

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### Event-History Analysis: Regression for Longitudinal Event Data

7.5 Credits

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Code: SO1FU19

Finalized by: Institutionsstyrelsen, 2024-03-26

Valid from: Spring semester 2025 (2025-01-20)

Level within study regulation: Third cycle

Course modules      Event-History Analysis: Regression for Longitudinal Event Data, 7.5 Credits

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#### 1. Entry requirements

No Translation Available

#### 2. Learning outcomes

*By the end of the course, participants should be able to:*

- Describe the basic concepts of event-history analysis
- Understand the relationship between event-history analysis, basic demographic methods and regression analysis
- Understand the type of research questions for which event history analysis is an appropriate method to use
- Interpret studies that have used event-history analysis
- Reflect on the assumptions, problems and limitations of event-history methods

*Regarding the use of statistical software:*

- 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 an academic audience as well as a wider public

#### 3. Content

This course is an introduction to event-history analysis (also known as survival analysis, hazard regression, intensity regression, or duration data analysis) and is given at the advanced (Masters / PhD level). 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. In particular circumstances, the use of other statistical



plagiarism).

Having study groups together is stimulating and time-saving, but when it comes to examination tasks, it is important to work independently (unless otherwise clearly stated) to avoid being considered as unauthorized collaboration.

Cheating also includes, for example, the use of unauthorized aids such as mobile phones or generative AI during an examination. The use of generative AI or similar tools in exam tasks without the examiner's explicit permission and without confirmation is considered cheating.

#### **Interim provisions**

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**

Those who have passed the results of the course 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, SO7133 Event-History Analysis: Regression for Longitudinal Event Data or the sub-course 1M31 Introduction to Event-History Analysis within SO8040, or equivalent, cannot be admitted to the course

#### **6. Form of instruction**

The course consists of lectures, research findings from published studies and computer-based exercises.

#### **Literature**

The current reading list is available no later than two months before the start of the course.