



## Mi456 Special Topics in Quantitative Analysis

The topic of this course in Lent Term 2010 will be

### Event history analysis

The course will cover statistical methods for the analysis of time-to-event data (known in various contexts as event history analysis, survival analysis, lifetime data analysis etc.). The topics covered include

- Exploratory analysis of survivor distributions and hazard rates
- Regression modelling of event history data:
  - Parametric models
  - The Cox proportional hazards model
  - Discrete-time survival models
  - Models for multiple events and competing risks

Other related topics may also be discussed if time permits. The treatment will be relatively non-mathematical, and will emphasise applied examples from social science literature.

### Availability and prerequisites

This is an optional course for MSc Social Research Methods and MSc Statistics. Students taking other Master's degrees may be admitted, space and timetabling permitting, and with the approval of their department and the course teacher. The course is also open to PhD students.

Prerequisite for the course will be knowledge of standard regression models, to the level covered in Mi452.

### Teaching

The course will be taught in the Lent Term 2010 by Dr Jouni Kuha (B802, [j.kuha@lse.ac.uk](mailto:j.kuha@lse.ac.uk)). There will be ten one-hour lectures, Wednesdays 9.00-10.00 in S221 (starting 13 January 2010), and five two-hour computer classes, Wednesdays 10.00-11.00 in S018 in weeks 2, 4, 6, 8 and 10 of LT. The Stata software will be used for the classes. Previous knowledge of Stata will be useful but not essential.

### Assessment

Two-hour written examination in the ST (50%) and coursework (50%).

### Reading list

The main course text will be J M Box-Steffensmeier and B S Jones, *Event History Modelling* (Cambridge 2004).