

"Discrete Choice Models: Theory and Applications to Environment, Landscape, Transportation and Marketing"

Bologna, June 22 - July 3, 2009
Deadline for applications: May 20, 2009

Discrete choice modelling has been a fast growing topic in the economic literature. Its wide-ranging applications to problems of qualitative choice regarding the environment, transportation, and marketing, have recently given rise to a large body of rapidly evolving literature. The flexibility of such a technique, the reliability of its results, and the possibility to consider and combine the analysis of stated and real choices make this method one of the most promising in applied preference estimation.

This course is delivered by top scholars and practitioners and it aims at learning both the fundamentals (week 1) and the recent advances (week 2) of discrete choice modelling. It will provide the appropriate knowledge of multinomial, nested and random parameters logit and probit models. The appropriate techniques for the design of experiments and choice tasks will be explained, with software applications and workshops regarding specific problems in the fields of environment, transportation, and marketing.

Target groups

The course is open to consultants, graduate students, academics, and other practitioners, with at least a master degree in agriculture, economics, statistics, or equivalent degrees. Students with a bachelor degree who are preparing their master degree dissertation will be also considered. The applications will be evaluated on the base of the curriculum vitae and of the motivations indicated in the letter of application. A presentation letter by at least an academic supervisor (teacher or researcher) endorsing the candidate will be also considered. Proficiency in English is necessary and must be clearly indicated in the application letter (TOEFL or IELTS or similar tests are welcome).

Objectives and Contents

The international summer school is articulated in two weeks. The first week covers introductory topics in the subject, and it will provide the appropriate knowledge of multinomial, nested and random parameters logit, testing of model specification and elements of experimental design. The second week covers advanced and frontier topics, including testing of non-nested hypothesis, advanced GEV models, post-estimation inference, efficient and Bayesian experimental design and derivation of welfare estimates. All topics will be covered theoretically and with hands-on applications with software during purpose-designed workshops. Real life examples will be used for specific problems in the fields of environment and landscape, transportation, and marketing.

Summary of course contents

Beginners module (Week 1: June 22-26)

- Binary choice models and Introduction to BIOGEME
- Multinomial choice models
- Experimental design - Deriving designs with Excel
- Generalized Extreme Value (GEV) models
- Mixed logit models

Advanced module (Week 2: June 29 - July 3)

- GEV refresher and Mixed logit part I, with Introduction to Biogeme
- Mixed logit part II
- Post-estimation & welfare estimates, with R-based routines
- Non linear utility, non-nested hypotheses
- Advanced topics in experimental design

As a general structure, each day is based on 4 periods of teaching, dealing with Theory, Applications, Tutorial on pc, Guided pc assignment.

Teaching staff

Beginners module (Week 1: June 22-26)

- Riccardo Scarpa - University of Waikato (New Zealand)
- Elisabetta Cherchi - University of Cagliari (Italy)
- John Rose - University of Sydney (Australia)
- Stephane Hess - University of Leeds (UK)
- Kenneth Train - University of California, Berkeley (USA)

Advanced module (Week 2: June 29 - July 3)

- Stephane Hess - University of Leeds (UK)
- Kenneth Train - University of California, Berkeley (USA)
- Roger H. von Haefen - North Carolina State University (USA)
- Michel Bierlaire - EPFL École Polytechnique Fédérale de Lausanne (Switzerland)
- John Rose - University of Sydney (Australia)

Credits and evaluation

At the end of the 2-week course a final evaluation will allow the attribution of a final score, valid for a total of **6 ECTS credits**, awarded by the Faculty of Agriculture. The final exam is not mandatory; the student who does not make the final exam gets a declaration of attendance. It is also possible to attend only one of the two 1-week modules. Also in this case a declaration of attendance will be issued.

Admission and fee

FEES (EUR)	Full	Reduced (scholarship)
Beginners	1 600,00	1 000,00
Advanced	2 000,00	1 400,00
2 weeks	3 400,00	2 200,00

The fee includes the teaching materials/handouts, breakfast, lunch and accommodation at the course venue in either double or triple bedrooms. Scholarships ranging from, Euro 600,00 to 1.200,00 per head (for about 10 students) will be allocated on the basis of quality of applicants and funds availability. Scholarships take the form of reduced tuition fees. The criteria for the assignment of the scholarship are based on order of pre-enrollment, provenance of the student, her/his income and her/his motivations, evaluated on the base of the application letter. The accidents insurance at the course venue is provided by the University of Bologna. Evidence of health insurance is required for students from outside the EU, at their own cost.

Venue

Villa Gandolfi-Pallavicini, Via Martelli, 22/24 (parking entrance Via Pallavicini, 18) 40138 Bologna. This is a gorgeous Renaissance villa (<http://www.villagandolfipallavicini.it>) located at the outskirts of Bologna, which has just been refurbished to host events. Students will be accommodated in the Villa itself. It is easily reachable from transportation hubs (bus 14A from the city center).

Interested parties can find the relevant information for registration at the following contacts:

Secretariat / Segreteria Organizzativa

Elisabetta De Toma, Daniela Ciccardi; Lida Pompei
Fondazione Alma Mater
Via Martelli, 22/24 (parking entrance Via Pallavicini, 18)
40138 Bologna
Tel. 051 2091398; 051 2091368; 051 2091988
Fax 051 2091384

d.ciccardi@fondazionealmamater.it

elisabetta.detoma@unibo.it

The Director of the Summer School
Prof. Maurizio Canavari