(Mixed) Methods in International Cooperation: Theory and Applications

EITM Europe Summer Institute 2017
Collegio Carlo Alberto

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University of Glasgow
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— Latest version of syllabus is here —

Course details:
Thursday, 6 June: 9:30-12:00 and 14:30-17:00
Friday, 7 June: 9:30-12:00 and 14:30-17:00
Saturday, 8 June: 9:30-12:00 and 14:30-17:00

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Motivation: The basic EITM tenet is to use formal models to derive testable hypotheses in order to put these hypotheses to a rigorous empirical test. Structural estimation is probably the most direct way to achieve this, but it is not always feasible. The EITM approach is moreover methodologically agnostic. This is why this course covers an array of methods (and their theoretical foundations) that are amenable to empirical testing of formal models, including case studies, regression techniques, (survey) experimental methods, and structural estimation for strategic choice. We will discuss which methods are appropriate for what types of game-theoretic models, how to implement these methods, and how to combine various methods to gain most explanatory leverage. Applications will mainly come from research on conflict and international cooperation.
**Character of the course:** The course comes in the format of morning lectures and afternoon applied seminars/labs. The main goal is to encourage students to think hard about how to test hypotheses derived from formal models in a rigorous and multi-faceted way, whatever the exact method(s). In that, the course will be a hybrid of game theory, research design, and methods. It will benefit from active student participation and classroom discussions. So, if you have your ‘own’ models and/or data, feel free to bring them along—I am happy to discuss.

**Prerequisites and readings:** Because of the hybrid nature of the class, I assume you are familiar with the basics of research design, game theory, political science statistics, and have working knowledge in the statistical programming language R, at the level taught in the foundation seminars. To make our sessions as productive as possible, you should take a careful look at the readings before each class, all of which (except for the two books) are available here. I do not expect you to understand every single aspect or have worked through all the equations/analyses, but you should have a good grasp of the core ideas.

Furthermore, you do not have to read papers flagged as ‘APPLICATION’ before coming to class; we will use these readings (i.e., parts of them) for the ‘homework’ sheets and seminar/lab sessions. As we are going to cover various angles of mixed methods in international cooperation research, there is no single textbook, but these two classics will hopefully put you on the right track, so (re)reading them may be useful:


If you have not read either, for the purposes of this course, Morton’s (1999) *Methods & Models* is more directly relevant. The following brief chapter by Aldrich, Alt, and Lupia in the *Oxford Handbook of Political Methodology* is a great starting point that sets the stage:


**Day I: Research design and case studies:**


Day II: Regression and experimental methods: Formal models allow to derive directly testable hypotheses, e.g., from comparative statics. This module presents regression and experimental methods for testing theories and discusses common pitfalls as well as solutions to more robust inference.


Day III: Structural estimation and strategic choice: International cooperation is necessarily strategic. While strategic interaction is central to game-theoretic models, it is often ignored in empirical work. Here, we introduce structural estimation to account for strategic choice in empirical estimation.


