Empirical Methods in Energy and Environmental Economics
Doctoral Lecture / Seminar
Department of Management, Technology and Economics
ETH Zurich

(Preliminary program)

Course Number 364 0513-00

Semester: Autumn, 2019

Location: ZUE G1, Zürichbergstrasse 18, 8032 Zürich

Dates:
- Thursday, 9 January 2020: 9:00 – 17:00
- Friday, 10 January 2020: 9:00 – 17:00
- Saturday, 11 January 2020: 9:00-15.00

Instructors
- Professor Massimo Filippini (ETH Zürich & USI)
- Professor William Greene (Stern School of Business, New York University)
- Professor Sebastien Houde (Grenoble Ecole de Management & ETH Zürich)

Invited speakers
- Professor Kenneth Gillingham (Yale University)
- Professor Beat Hintermann (Basel University)
- Professor Matt Kotchen (Yale University)

Course Description
This course is designed for Ph.D. students and advanced Masters students who are interested in energy and environmental economics. The focus of the lectures/seminars is on methods of applied econometrics in these fields. The course is composed of short lectures on specific topics and a seminar series. In the seminar series, the PhD students will have an opportunity to present their own papers or to present and discuss some empirical studies. Feedback will be provided by experts and colleagues.

Prerequisite
Students are expected to have attended courses in advanced microeconomics and in econometrics.

Course Objective
The objectives of this course are twofold: first, students will learn about the application of econometric techniques in the fields of energy and environmental economics. Second, through the presentation of their papers or the presentation and discussion of the existing literature, students will also get a sense of how critical thinking can be used to assess empirical research in energy and environmental economics.

Grading
Students are required to make a presentation of an already published paper from a list that will be provided and write a 2-3 page summary of the paper or to present their own paper. The evaluation will be based on the presentation and on the slides used for the presentation. The duration of each presentation and subsequent discussion should be no more than 30 minutes.
**Registration**

ETH students can register via mystudies (course number 364-0513-00L).

Students from universities may **register as special students**:

- ETH Lausanne (EPFL) and University of Zürich: all graduate and PhD students
- Other Swiss universities: All PhD students

Registration as a special student is free of charge with deadline at the end of the second week of semester. Details can be found at [https://www.ethz.ch/en/studies/non-degree-courses/special-students.html](https://www.ethz.ch/en/studies/non-degree-courses/special-students.html).

Students from non-Swiss universities: please send an e-mail to Fabio Haufler (fhaufler@ethz.ch) by December 20th, 2019.

**Course Resources**

Materials for the course are shared via dropbox. The respective link is distributed among all participants.

**Course Agenda**

**Day 1: Thursday, January 9**

- 09:00 – 10:30 Session 1: Multinomial choice, heterogeneity (*instructor: Greene*)
- 10:30 – 11:00 <break>
- 11:00 – 12:30 Session 2: Multinomial choice, heterogeneity (*instructor: Greene*)
- 12:30 – 14:00 <lunch>
- 13:30 – 15:00 Session 3: Latent class and Mixed logit (*instructor: Greene*)
- 15:00 – 15:30 <break>
- 15:30 – 16:30 Session 3: Latent class and Mixed logit (*instructor: Greene*)

**Day 2: Friday, January 10**

- 08:30 – 10:00 Session 1: Measurement of the energy efficiency (*instructor: Filippini*)
- 10:00 – 10:30 <break>
- 10:30 – 12:00 Session 2: Structural models (*instructor: Houde*)
- 12:00 – 13:00 <lunch>
- 13:00 – 14:30 Session 3: Student Presentations
- 14:30 – 15:00 <break>
- 15:00 – 16:30 Session 3: Student Presentations

**Day 3: Saturday, January 11**

- 08:30 – 09:30 Session 1: Seminar by Prof. Kenneth Gillingham (*Yale University*)
- 09:30 – 10:30 Session 1: Seminar by Prof. Beat Hintermann (*Basel University*)
- 10:30 – 11:30 Session 1: Seminar by Prof. Matt Kotchen (*Yale University*)
- 10:00 – 10:30 <break>
- 10:30 – 12:30 Session 2: Student Presentations
- 12:30 – 13:30 <lunch>
- 13:30 – 15:30 Session 3: Student Presentations


On January 13 – 14, 2020, the EMEE Annual Workshop 2020 will take place at ETH Zurich. This is a great opportunity to discuss ongoing empirical research in energy and environmental economics. Further information is available at [www.emee.ethz.ch/events](http://www.emee.ethz.ch/events) or emee-workshop@ethz.ch.