Doctoral Candidate Seminar on Advances in Energy Economics

This version: (First official draft)

Course instructors

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Location

Campus Munich

Application and registration procedure

Goal and target audience
The goal of the seminar is to foster a vibrant academic environment where doctoral candidates engage in stimulating discussions with peers and senior researchers (professors) that would help advancing their research. Focused on the advances in energy economics, the seminar is designed for doctoral candidates and postdoctoral researchers with an interest in related fields.

Application/Registration process
To register for the course please email cem@wi.tum.de by Sep 15th, 2023. Spaces limited to 10 participants.

Course aims

What this course is
This doctoral candidate seminar will focus on the issues of energy transition, sustainability, natural resource exploitation, and adoption of innovations brought to address climate change problems. During the course, participants will review and discuss the diversity of the research questions, modeling approaches, and empirical data analyses receiving increasing attention in the field. The lectures and presentations will focus on the publications in the leading energy and resource economics peer-review journals, conference proceedings, and book chapters.

What this course is not
This course is not an introduction to economics or econometrics. Participants are also expected to be mathematically equipped to be able to read the course materials provided.
Course objectives

Knowledge Objectives
After this course, participants should
• possess knowledge of state-of-the-art energy economics literature,
• have an understanding of the methodological approaches for empirical-based energy economics research,
• be familiar with common mistakes and short-comings of empirical research designs, and
• be knowledgeable about the most important aspects of publishing in top journals in energy and resource economics.

Skills Objectives
After this course, participants should
• be able to identify interesting, important, and researchable topics in energy economics,
• have the ability to formulate testable hypotheses about research topics,
• be skilled in empirically testing hypotheses using valid, powerful, and well-chosen research designs, and
• be able to write a review about a working paper.

Learning Objectives
Participants will
• gain a comprehensive understanding of the contemporary debates and research gaps in energy and resource economics,
• develop the skills to identify research opportunities and formulate research questions in their own areas of interest, and
• have the ability to apply economic theories and methods to analyze real-world energy challenges and propose evidence-based solutions.

Preliminary schedule
From Oct 15 2023 to Mar 2024 (14 sessions, 2 SWS)

Core readings
tbd

Course procedures
1. Literature Review and Selection: The lecturers will identify relevant and seminal research papers, working papers, and book chapters to form the basis of seminar discussions.
2. Presentation with discussion leads: The assigned reading material (e.g., articles, book chapters, etc.) should be read by participants prior to the class session. Each session will be led by one to two discussion leads, who will summarize the key points of the reading material, walk the class through the methodology and calculation procedures of the paper and discuss the findings of the respective journal article in form of a presentation. The discussion leads will then critically analyze the article with respect to the research question and study design and the quality of the arguments.

The sessions will be interactive and participation in the discussions is expected from all participants.

Assessment
The grade will be based on the students’ performance, including their active participation in class discussions, presentations, and discussions.
Workload
3 ECTS (21 hours of lectures, 90 hours total workload)