Economics of Climate Change (02 143 02605)

Lecturer: Björn Vollan

Room: t.b.a.
Time: t.b.a.

Module: Seminar on Institutional Economics, Seminar on Economic Policy,

Vertiefungsmodul Economic Policy, Basismodul Institutional Economics

The course will be offered every winter semester

The aim of this seminar is to get an understanding of the relevant economic concepts in the discussion of climate change. Hereby, papers come from different methodological backgrounds. We will discuss conceptual, theoretical, empirical and experimental papers. A central economic task is the valuation of impacts and abatement costs. Hence, some papers will focus on cost-benefit calculations and Integrated Assessment Models (DICE Model). We will also prominently discuss policies for reducing GHG emissions such as Cap and Trade.

- 1. Students are required to (a) hand in an essay, (b) present this essay, (c) discuss an essay presented by another student and. All participants will present their essay in a twenty minute presentation followed by a discussant. The discussant should not take longer than five minutes. All participants need to prepare a discussion. The discussant should first critically proofread the essay (strength/weaknesses) before presenting own ideas, opinions and connecting links to different topics that will lead to a discussion involving all participants.
- 2. Aim of the essay: Depending on the specific topic an own literature search should be done in order to be able to put the recommended paper(s) in a broader perspective. This is important for the introduction and conclusion of the essay. In the main part of their essay seminar participants will describe the empirical approach, quality of data, methods and conclusions of one or two specific papers. Hereby it is essential that the participants decide which information provided in the papers is important for the overall understanding. For theoretical papers it is important to discuss assumptions and plausibility. The conclusion of the term paper should consist of a critical acclaim of the chosen paper(s) (how reliable are the findings?) and answers the risen research question of the introduction of the term paper. The conclusion should also include a short "research proposal" that sketches a research design to address a related question.
- 3. The term paper needs to be finished and available for all participants as pdf at latest one week before the start of the seminar. The term paper should have 15 pages excluding figures and tables. The line spacing within the text should be 1,5 (1 for footnotes). A common and legible font should be used (ex. Times New Roman or Arial). The font size should be 12 within the academic text itself and 10 for footnotes. The block format should be used for paragraph formatting. The term paper should preferably be written in English.

4. The format of the term paper should follow the requirements of a master/diploma thesis. If any form of plagiarism is found the term paper will be rated with the grade 5,0. Term papers should include at least a minimum of linguistic elegance and accuracy.

Participants can choose from the topics below or develop an own research topic after consultation with me. Each topic can only be distributed to one person.

- 1) Setting the scene: The IPCC Report and basic facts about global warming
- 2) Impacts of Climate Change (Production and Welfare)
- 3) Impacts of Climate Change (Extreme events)
- 4) Impacts of Climate Change (Gradual change in resource availability)
- 5) Impacts of Climate Change (Migration)
- 6) Impacts of Climate Change (Conflict)
- 7) Cost-Benefit: The DICE Model (Nordhaus)
- 8) Cost-Benefit: What do the critics say? (Discounting, Uncertainty and fat tails)
- 9) Cost-Benefit: What do the critics say? (Pindyck, Lomborg)
- 10) Policies: Cap-and-Trade (Theory and experimental evidence)
- 11) Policies: Cap-and-Trade in the EU and US
- 12) Policies: Impact of Cap-and-Trade on the economy (Empirical)
- 13) Policies: International Agreements (Theory and experimental evidence)
- 14) Policies: International Agreements from Kyoto to Rio
- 15) Policies: International Agreements and equity considerations

You can apply to the seminar by sending me an email (<u>bjoern.vollan@wiwi.uni-marburg.de</u>) with your preferred two topics. Allocation will be done according to "first come first serve" criteria. The literature will be distributed at the beginning of the semester in October 2016 in a kick-off meeting where we will discuss the procedure of the seminar. The seminar will be held on two days in January 2017.