**Master Seminar in Environmental Economics: Forest Economics**

**Supervising Professor:** Dr. Sampo Pihlainen from University of Helsinki (replacing Prof. Quaas).

**Why to study forest economics?** Forests cover a significant portion of the world land surface and are the source of livelihood to millions of people, being one of the most important renewable natural resources. Furthermore, they are hotspots to biodiversity, and essential carbon sinks and storages. However, the simultaneous realization of these different benefits of forest is cumbersome to achieve. Forest economics tries to resolve these conflicting interests in forest use by applying the tools of natural resource economics.

**What to expect:** The main achievement in the seminar is the seminar paper with the length of approximately 15 pages. Other activities in the seminar support this main task. In the beginning of the seminar, you are asked to write an elevator speech about your topic and comment on other students’ speeches. Later, you are required to hand in a concept paper, which gives a brief outlook on the chosen topic, the research question, the essential literature and the preliminary table of contents. The concept papers is commented by other students in the seminar and also by the supervisor. Finally, students are required to give a short (~15 minutes) oral presentation of their work and also to act as a lead discussant for one other presentation.

The seminar meetings are intended to help you in the writing process and to provide peer support. Thus, attendance in all the meetings and presentation sessions is mandatory. One intended learning outcome from this seminar is the enhanced skill to give and receive constructive comments on the ongoing work.

**Timetable:**
All meetings are **Thursday 14:00-16:00 (Week 11-13 possibly 14:00-18:00 depending on number of participants)**

- Week 1 (11.4.2019): Starting meeting
  - General information about the seminar
  - Introduction to the potential seminar topics and the preliminary choice of the topic
  - Assigning the elevator speech -task

- Week 2 (18.4.2019): Elevator speech meeting
  - Going through the results of the elevator speech –task
  - Assigning the concept paper -task

- Week 4 (2.5.2019): Concept paper meeting
  - Going through the results of the concept paper –task

- Week 8 (30.5.2019): Support meeting
  - Checking the status of the works
  - Forming the discussant pairs

- Week 11 (20.06.2019): Seminar presentations 1

- Week 12 (27.6.2019): Seminar presentations 2

- Week 13 (04.07.2019): Seminar presentations 3 (if needed)
Potential seminar topics

1. Economic instruments to protect forest biodiversity
2. Carbon subsidy systems in internalizing the market externality of forest carbon sequestration
3. Economic-ecological optimization of forest management
4. The economics of continuous cover forest management
5. Combined production of timber and amenities using Faustmann formula
6. Public good properties of forests
7. The effect of the property rights of forests to their sustainable use
8. Tragedy of the Commons in forests
9. The economically optimal choice between clearcut and continuous cover forest management
10. Imperfect competition in forest product markets
11. Economic optimization of tropical timber production
12. Forests as Common Pool Resources (CPR)
13. Valuation of non-market ecosystem services of forest
14. Economics of climate change mitigation by enhancing forest carbon sinks
15. Faustmann formula and its extensions
16. Forests in the European Union climate policy framework
17. Market failures causing tropical forest loss
18. Subsidies for timber and energy wood production
19. Optimization of thinnings in forest economics
20. Economics of forest-climate interaction
21. Combined production of timber and carbon storage using Faustmann formula
22. Bioenergy from forests – economic evaluation
23. Stochastics in forest economics
24. Market-level models in forest economics
25. The use of generalized size- and age-class models in forest economics