

**Centre for Fisheries & Aquaculture Management & Economics in cooperation with
the Danish Graduate Programme in Economics**

Ph.D.-Course on:

Income, Wealth, and the Maximum Principle

21 – 24 March 2004

The Institute of Economics – University of Copenhagen

Guest Lecturer *Professor Martin Weitzman*
Professor of Economics Ernest E. Monrad
Department of Economics
Harvard University

COURSE CONTENT

The course applies the maximum principle of optimal control theory to analyze a wide variety of dynamic economic models. The course also presents a new elementary yet rigorous proof of the maximum principle and a new way of applying the principle that will enable students to solve any one-dimensional problem routinely.

The unified framework will illuminate many famous economic examples and models. The course emphasizes the basic principles and fundamental unity of all problems involving capital, investment, and time -- including harvesting of renewable resources, extraction of non-renewable resources, analysis of dynamic environmental externalities, optimal growth, equilibrium of competitive stock markets. A student will come away from this course knowing well the basic workhorse models that arise in all branches of dynamic economics and understanding how to solve them.

The course emphasizes the close connection between optimal control theory and the classical themes of capital theory. It will explain how the following four concepts are connected in a dynamic economy: (1) wealth; (2) income; (3) accounting; (4) sustainability.

READINGS

Martin Weitzman (2003):

Income, Wealth, and the Maximum Principle, Harvard University Press

PARTICIPATION

The course is free of charge for anyone wishing to participate. Deadline for enrolment is 23rd of February 2004. Travel and accommodation expenses are covered for a limited number of participants from the Nordic and Baltic countries by a grant from NorFa. Please notify us when you enrol.

CONTACT

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