



PhD Network

Title	Assessing Economic Policies Using the Real Options Methodology
Lecturer(s)	Kutay Cingiz, Silke Hüttel, Justus Wesseler
ECTS	Three
Period	August 21 - 25, 2023
Format	<input checked="" type="checkbox"/> The course can be taken in class only <input type="checkbox"/> The course can be taken online only <input type="checkbox"/> The course can be taken both in class and online
Category*	<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Empirical Methods <input type="checkbox"/> Thematic <input type="checkbox"/> Scientific writing for Agricultural Economists
Course fee	Euros 500
Course Contents	<p>Learning objectives: This course will address the issue of irreversibility from an economic point of view. Different approaches dealing with irreversibilities have emerged in the economic literature. The two most prominent ones are the quasi option and real option value theory. Application of both approaches requires technical skills most students find difficult.</p> <p>The objective of the course is to introduce the origins of the quasi option value and real option values, to teach the methods most commonly used (discrete methods such as decision trees; continuous time, continuous state models using stochastic processes; Itô calculus), and to discuss and practice various applications including non-renewable resource use, technology adoption, climate change, forestry, and food- and bio-safety.</p> <p>The course will include two parts. One week of lectures and exercises with assignments and a course paper. For passing the course students need to participate in lectures and exercises (min. 90%) and submit the course paper within six months after the course.</p> <p>After successful completion participants are expected to be able to:</p> <ul style="list-style-type: none"> - know the economic implications and relevance of the irreversibility effect; - understand economic papers that apply real option models; - apply discrete state models for decision under uncertainty and irreversibility;

	<ul style="list-style-type: none"> - know the steps from discrete time, discrete state to continuous time, continuous state models; - develop real option models and analyse the results using numerical simulation methods. <p>Course activities</p> <ul style="list-style-type: none"> - Lectures on the skills needed (25%) - Practicals deepening the skills obtained (25%) - Course paper applying the skills obtained (50%) <p>Course materials</p> <ul style="list-style-type: none"> - Peer reviewed papers made available to course participants; - Simple models using MS-Excel illustrating basic concepts; - STATA based econometric models.
<p>Link to the course website institution (should contain information about enrolment)</p>	<p>https://www.wur.nl/en/show/assessing-economic-policies-using-the-real-options-methodology-3-ects.htm</p>
<p>email address course organiser</p>	<p>marcella.haan@wur.nl</p>