




Wageningen University.		Sustainable Food Security: The value of systems thinking (APS-50803)		
Course description	You learn to apply a systems approach to food production systems with a focus on environmental sustainability, based on different disciplines and an approach that addresses the complexity of food production in both high and low productive systems			
Domain	Food security			
Keywords	Food production	Sustainability	System approach	keyword
Prerequisites	Knowledge about food production			
Level	Master introductory			
Language	English			
Number of credits and workload	3 credits	8-10 hrs per week	84 hrs in total	
Semester period and Start date course	Semester 2	Start date: start date. Not applicable		
Application deadline	1-Apr-19			
Full course description	<p>Have you ever considered how many aspects of food production affect the natural environment? Every aspect needs to be considered in attaining the future goal to produce enough food for the growing population while at the same time preserving our planet. It's as difficult as solving a Rubik's cube; changing one aspect may affect the environment in a major way.</p> <p>Systems theory, or systems thinking, is a way of understanding and working with the complexity of sustainable food production systems, which requires training in different disciplines and an approach that can address this complexity. This environmental studies course enables participants to apply the principles of a systems approach to food production with a focus on environmental sustainability.</p> <p>You will learn about:</p> <ul style="list-style-type: none"> • The concept of environmental sustainability and identify the main issues associated with food production • The basics of systems thinking and understand how the different aspects of a system influence one another and how a system itself is affected by its context • The relevance of crop and livestock productivity for environmental sustainability 			

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	<ul style="list-style-type: none"> • The environmental indicators and how to measure the environmental impact of food production at farm, village or regional level • Decision-making and life cycle assessment • Helpful tools and their strong and weak points <p>We will analyze production systems at both ends of the spectrum: highly productive systems with relatively high inputs and emissions to the environment, and low productive systems with low input use and depletion of soil fertility. Crop-livestock interaction is a focal point.</p>		
Platform and link to course description	edX/edge	https://www.edx.org/course/sustainable-food-security-value-systems-wageningenx-ffesx	
Course description in study guide	https://ssc.wur.nl/Handbook/Course/APS-50803		
Lecturer(s)	Imke de Boer, Gerrie van der Ven, Eddie Bokkers, Carolien Kroeze, Martin van Ittersum		
Extra Course information	The course contains no scheduled activities, students can follow the course anytime. The course is facilitated by moderators and there is limited or no online contact with the lecturers. It is meant for MSc-1 students who are interested in the topic of the course and lack sufficient knowledge in integrating disciplines and/or systems thinking analysis.		
Picture of course			
Final examination date and time /period	tbd	tbd	July/Aug 2019
		UTC+2	
Examination registration deadline or drop-out deadline	<p>Examination registration to be announced ~ June/July 2019</p> <p>Remarks on examination registration date</p> <p>Drop- out deadline If applicable, enter last drop-out date.</p> <p>Not applicable</p>		
Type of examination	assignments of the course (40%; minimum 5.5 on average) and a written exam (60%; minimum 5.5)		

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Midterm examination?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Additional information on midterm exam
Previous exam papers available	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	
Specific rules for examinations	Give details if particular rules apply like no use of calculator, watches etc	
Resit? and date	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Enter resit date. February 2020
Grade release and transcript release	31-Aug-19	Transcript release date if more than 1 week after grade release.

Available Places		50
	Interested	(Maximum) places per university <i>(give details if applicable, otherwise each participating university gets an equal part of the available places)</i>
Adelaide	<input type="checkbox"/> yes	Click or tap here to enter number
ANU	<input type="checkbox"/> yes	Click or tap here to enter number
EPFL	<input type="checkbox"/> yes	Click or tap here to enter number
HKUST	<input type="checkbox"/> yes	Click or tap here to enter number
Leiden	<input type="checkbox"/> yes	Click or tap here to enter number
Rice	<input type="checkbox"/> yes	Click or tap here to enter number
TU Delft	<input type="checkbox"/> yes	Click or tap here to enter number
UQ	<input type="checkbox"/> yes	Click or tap here to enter number
Wageningen	<input type="checkbox"/> yes	Click or tap here to enter number