Virtual Exchange Global Alliance

Wageningen University	Basics in Food Safety (FMH-51302)			
Course description	You will learn about the hazards associated with food and the tools to assess and quantify the dangers they can present so that you can differentiate what is a food myth vs. an actual risk.			
Domain	Biology and life sciences			
Keywords	Food hazards	Toxicology	Food risks	
Prerequisites	Secondary school biology			
Level	Bachelor introductory			
Language	English			
Number of credits and workload	**2 credits**	**6-8 hrs per week**	**56 hrs in total**	
Semester period and Start date course	**Semester** 2	**Start date**: Not applicable		
Application deadline	1-Apr-19			
Full course description	**Module 1: hazards and risks in the modern food chain** Introduction to the difference between a hazard and a risk, the different types of hazards present in food and the perception of risk by public. **Module 2: Interpretation of risks, probability and relevance** Introduction to risk reporting, how ways of presenting information can mislead consumers and difference between significance and relevance. **Module 3: Microorganisms in food: good, bad and/or a nuisance** Introduction to ubiquitous, good/bad or spoiling microorganisms. **Module 4: Qualitative and quantitative principles food safety of chemicals** Classification of risks as avoidable or unavoidable, difference between genotoxic and non-genotoxic compounds and examples of important genotoxic carcinogens present in the food chain as well as introduction to dose-response concept. **Module 5: Toxicological risk assessment** Introduction to risk assessment framework, different ways of performing risk assessments depending on the nature of the chemical (i.e. genotoxic vs. non genotoxic) and hands on risk assessment of the food additive cyclamate and the carcinogen acrylamide. **Module 6: Microbiological risk assessment** Introduction to contamination routes, dose-response relationship and effect of			

	temperature on microorganisms' growth as well as sampling and legal requirements. **Module 7: Ways to reduce risks in food** Introduction to prevention of avoidable hazard, effect of heat on hazards and inactivation as well as prevention techniques to reduce risks in food. **Module 8: Final assignment/exam** Wrap-up.	
Platform and link to course description	edX	https://www.edx.org/course/nutrition-health-food-risks-wageningenx-nutr103x-0
Course description in study guide	https://ssc.wur.nl/Handbook/Course/FHM-51302	
Lecturer(s)	Ivonne Rietjens, Marcel Zwietering, Martine Reij	
Extra Course information	Wageningen online courses are fully self-paced and no lecturer is involved. Students must be able to manage their study process independently	
Picture of course		

Final examination date and time /period	tbd	tbd	July/Aug 2019
Examination registration deadline or drop-out deadline	Examination registration to be announced ~ June/July 2019 Drop- out deadline Not applicable		
Type of examination	A written exam taken on campus (70%) and final assignment in week 8 of online course (30%)		
Midterm examination?	☐ **yes** ☒ **no**		
Previous exam papers available	☐ **yes** ☒ **no**		
Specific rules for examinations			

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Resit? and date	☒ **yes** ☐ **no**	February 2020
Grade release and transcript release	31-Aug-19	

Avalaible Places	**50**	
	Interested	**(Maximum) places per university** *(give details if applicable, otherwise each participating university gets an equal part of the available places)*
Adelaide	☐ **yes**	Click or tap here to enter number
ANU	☐ **yes**	Click or tap here to enter number
EPFL	☐ **yes**	Click or tap here to enter number
HKUST	☐ **yes**	Click or tap here to enter number
Leiden	☐ **yes**	Click or tap here to enter number
Rice	☐ **yes**	Click or tap here to enter number
TU Delft	☐ **yes**	Click or tap here to enter number
UQ	☐ **yes**	Click or tap here to enter number
Wageningen	☐ **yes**	Click or tap here to enter number