

Module Code	19349023	Course Term	
Course Subject Name	<p align="center">Special Lecture on Advanced Topics of Agriculture 3</p> <p align="center">Recent food safety issued in the world</p>	<p align="center">Autumn Semester</p>	
Course Tutor	H.Kobayashi		
Credit	2		Course Term
Schools	School of Agriculture		<p align="center">FRI-5</p>
Taught Year			
Campus	Ito campus	<p align="center">Friday, 5th period (16:40-18:10)</p>	
Subject Area	Specialized Courses		
Course Subject Classification	Common Basic Subject		
Course Requirements	Class attendance, 20-min Presentation, and 3000-words report		
Course Requirement (Pre-requisite)	Basic knowledge in microbiology		
Course Outline			
The course provides an introduction to the fundamental principles of food safety.			
key words			
Food safety, Risk analysis, Case study, food poisoning bacteria			
Study Objectives			
(General)			
To gain a deeper understanding of food safety from scientific and political approach through food poisoning cases.			
(Specific)			
<ol style="list-style-type: none"> 1. Students can learn about the nature of foodborne pathogens. 2. Students can learn about the detection methods for foodborne pathogens. 3. Students can learn modern food safety policies in the world. 4. Students can learn notorious food safety issues in the world. 			
Course Plan (Tentative)			
<ol style="list-style-type: none"> 1. Course overview; food safety and food security 2 and 3. Agencies related food safety in Japan, US, EU, UN and China 4. Basic bacteriology and molecular biology 5. <i>E. coli</i> 0111 outbreak in Japan in 2011 6. <i>E. coli</i> 0157 outbreak in Japan in 2012 7. <i>E. coli</i> 145 outbreak in EU in 2011 8. <i>Listeria monocytogenes</i> outbreak in U.S in 2011 9. Chinese food safety scandals 10. Emergence of drug-resistant pathogens 11. Detection methods of bacteria, traditional techniques and modern technology 12. Food preservation techniques 13. Hazard analysis and critical control point (HACCP) 14 and 15. Students presentation, Course review 			
Course Approaches			
Textbooks	Handouts will be provided in every lecture.		
Reference Books			
Study consultation (office hour)	E-mail; kobayashih@fwu.ac.jp		
Exams/Results Evaluation Method	Attendance, presentation, and reports		
Others			