

## 《食品安全学》课程教学大纲

课程基本信息 (Course Information)					
课程代码 (Course Code)	FS332	*学时 (Credit Hours)	48	*学分 (Credits)	3
*课程名称 (Course Name)	(中文) 食品安全学				
	(英文) Food Safety				
课程性质 (Course Type)	专业必修课				
授课对象 (Target Audience)	食品科学与工程专业和食品质量与安全专业本科生				
授课语言 (Language of Instruction)	中英文双语				
*开课院系 (School)	农业与生物学院				
先修课程 (Prerequisite)	微生物学、分析化学等				
授课教师 (Instructor)	史贤明, Harold Corke	课程网址 (Course Webpage)	无		
*课程简介 (Description)	<p>《食品安全学》是食品科学与工程专业和食品质量与安全专业的一门重要的专业核心课程。</p> <p>本课程主要阐述环境、生产、贮藏、运输设备、包装材料和食品中的生物性和化学性有毒有害物质、不安全因素等对食品安全性的影响；同时介绍了食品安全性评价、食品安全标准与质量控制等相关的理论和方法。</p> <p>通过本课程的学习，使学生对食品及环境中的食品安全性问题有一个全面的认识，同时掌握食品安全性评价、食品安全标准与食品质量控制等内容和方法。</p> <p>通过本课程的学习，使学生了解食品链中的各种危害因子，启发学生综合运用已学到的食品专业知识和技术来分析和解决食品中的安全问题。</p> <p>通过本课程的学习，使学生了解食品安全中的新问题和研究新进展，引导学生结合实际、深入调查、反复思考，逐步建立自己的研究兴趣。</p>				
*课程简介 (Description)	<p>"Food safety" is an important specialized core curriculum. This course is designed for the students who are specialized in the field of food science and technology as well as the field of food quality and safety.</p> <p>The content of this course focuses on the impact of various factors on food safety. These factors include environmental pollution, contamination in production, storage, transportation equipment, packaging materials, biological and chemical toxic substances in the food and unsafe factors, etc. At the same time, the content of the food safety evaluation,</p>				

	<p>food safety standards and quality control are also introduced in this course.</p> <p>Through the study of this course, the students will have a comprehensive understanding of food safety problems concerning food and the environment, and the students will also master the content and methods about food safety evaluation, food safety standards and food quality control etc.</p> <p>Through the study of this course, the students need to understand the various risk factors in the food chain and be inspired to use learned food professional knowledge and technology to analyze and solve the problems of food safety in real life.</p> <p>Through the study of this course, the students will be enabled to understand the new problems and new research progress in food safety, and the students will be guided to gradually establish their own research interests through combining with practice, doing in-depth investigation and thinking repeatedly.</p>
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课程教学大纲 (Course Syllabus)

<p>*学习目标(Learning Outcomes)</p>	<ol style="list-style-type: none"> <li>1. 通过介绍食品链中的各种危害因子, 启发学生综合运用已学到的生物学和化学等学科中的知识和技术来分析和解决食品中的安全问题 (A5.1.2, A5.2.1)。</li> <li>2. 通过讲授食品安全中的新问题和研究新进展, 引导学生结合实际、深入调查、反复思考, 逐步建立自己的研究兴趣 (B1, B3, C4)。</li> <li>3. 通过课外实验室开放、广泛查阅有关资料和论文、课堂内外的讨论与交流, 使学生具有一定的分析和解决问题的能力 (B2, B4, B9)。</li> </ol> <ol style="list-style-type: none"> <li>1. Through the introduction of various hazard factors in the food chain, students are encouraged to use the knowledge and techniques in biology and chemistry that have been learned to analyze and solve food safety problems (A5.1.2, A5.2.1).</li> <li>2. Through teaching new issues in food safety and researching new developments, students are guided to integrate practicality, in-depth investigation, and repeated thinking, and gradually establish their own research interests (B1, B3, C4).</li> <li>3. Through the opening of extra-curricular laboratories, extensive access to relevant materials and papers, and discussions and exchanges both inside and outside the classroom, students have a certain ability to analyze and solve problems (B2, B4, B9).</li> </ol>
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	教学内容	学时	教学方式	作业及要求	基本要求	考查方式
<p>*教学内容 进度安排及要求 (Class Schedule &amp; Requirements)</p>	绪论 Introduction	2	课堂讲授 Lecture			
	环境污染对食品 安全性的影响 Impact of environmental pollution on food	4	课堂讲授 Lecture			

	safety					
	食物中的天然有毒物质 Natural toxic substances in food	4	课堂讲授+课堂讨论 Lecture+ Discussion	每章作业 assignment	能出席课堂，掌握每章的知识点。 Attend the lecture and master the knowledge of each chapter.	课堂出席率+作业+讨论+考试 Attendance rate + assignment + discussion + exam
	膳食结构中的不安全因素 Unsafe factors in the dietary structure	4	课堂讲授+课堂讨论 Lecture+ Discussion			
	化学物质应用对食品安全性的影响 Effects of Chemical Substances on Food Safety	6	课堂讲授 Lecture			
	生物性污染对食品安全性的影响 Effects of Biological Pollution on Food Safety	4	课堂讲授 Lecture			
	包装材料和容器对食品安全性的影响 Effects of packaging materials and containers on food safety	4	课堂讲授 Lecture			
	食品安全性的评价 Food safety evaluation	4	课堂讲授 Lecture			
	食品质量控制与安全法规 Food Quality Control and Safety Regulations	4	课堂讲授 Lecture			
	食品生产中的安全性与质量控制 Safety and Quality Control in Food Production	4	课堂讲授 Lecture			

	转基因食品的安全性评价与检测技术 Safety Evaluation and Detection Technology of Genetically Modified Food	4	课堂讲授+课堂讨论 Lecture+ Discussion			
	食品安全检测中的现代高新技术 Modern high-tech in food safety testing	4	课堂讲授+课堂讨论 Lecture+ Discussion			
*考核方式 (Grading)	<p>最终成绩由平时作业、课堂表现、考试成绩组合而成。</p> <p>各部分所占比例如下：</p> <p>课堂回答问题及讨论：30%，主要考核对知识点的掌握程度及表达能力。</p> <p>作业及报告讨论：20%，主要考核分析解决问题、创造性及表达等方面的能力。</p> <p>考试：50%。主要考核对食品安全的基本知识和安全质量控制方法的掌握程度。</p> <p>The final result is a combination of homework, class performance, and exam results.</p> <p>The proportion of each part is as follows:</p> <p>Answer questions and join discussion during the lecture: 30%, evaluate the mastery of knowledge and ability to express.</p> <p>Homework and report discussion: 20%, evaluate the ability of analyzing and solving problems, creativity and expression.</p> <p>Exam: 50%. It mainly evaluates the basic knowledge of food safety and the mastery of safety and quality control methods.</p>					
*教材或参考资料 (Textbooks & Other Materials)	<p>教材：</p> <p>1. 《食品安全与卫生学》，史贤明主编（我校教师），中国农业出版社，2003年3月第一版，ISBN：9787109077621，使用2届，非外文教材，非国家级规划教材，面向21世纪课程教材。</p> <p>The food safety and hygiene, Edited by Shi Xianming, China agriculture press, 2003 (1<sup>st</sup> edition), ISBN: 9787109077621, not a textbook in foreign language, textbook series for 21<sup>st</sup> century.</p> <p>参考资料：</p> <p>1. 食品安全学，王际辉主编，普通高等教育“十二五”规划教材，中国轻工业出版社，2013。</p>					

	Food Safety, Edited by Wang Jihui, China light industry press, 2013. 2. Jay, J. M., Modern Food Microbiology. 6th edition. Aspen Publication, Gaithersburg, Maryland. 2000.
其它 (More)	无
备注 (Notes)	无

备注说明：

1. 带\*内容为必填项。
2. 课程简介字数为 300-500 字；课程大纲以表述清楚教学安排为宜，字数不限。