

## 《专业实习（食品科学与工程）》课程教学大纲

课程基本信息 (Course Information)					
课程代码 (Course Code)	AB318	*学时 (Credit Hours)	64	*学分 (Credits)	2
*课程名称 (Course Name)	专业实习（食品科学与工程）				
	Food science and technology internship				
课程性质 (Course Type)	专业实践类必修课				
授课对象 (Target Audience)	食品科学与工程专业 3 年级本科生				
授课语言 (Language of Instruction)	中英文				
*开课院系 (School)	农业与生物学院				
先修课程 (Prerequisite)	食品工程原理、食品工艺学、食品化学、生物化学、微生物学、食品物性学、食品检验分析原理、食品保藏原理和食品机械设备等				
授课教师 (Instructor)	牛宇戈等	课程网址 (Course Webpage)			
*课程简介 (Description)	<p>食品专业实习是食品专业必修的专业实践类课程。通过在典型的有代表性的企业实习，贯彻理论和实践相结合的教学原则，使学生初步了解有关企业的组织管理、典型产品的生产过程；扩大和丰富生产知识、工艺知识和设备的运转使用知识；了解专业生产发展动态，增强感性认识；培养学生调查研究、分析和解决实际问题的能力；组织、管理工作的能力；开拓视野，为后续课程的学习奠定基础；促使从课目分科学习向实际综合应用和从知识积累向能力生成的转化，以提高教学质量和培养宽厚型、复合型、创新型的人才。</p>				
*课程简介 (Description)	<p>Food science and technology professional practice is a compulsory course focus on professional practice. Through the typical enterprise internships and implementing the teaching principles of combining theory and practice, students can understand the organization and management of the enterprise and the production process of typical products. Expand and enrich their product knowledge, process knowledge and equipment operation knowledge during the practice. Understand the development of professional production and enhance perceptual knowledge. Cultivate students' ability to investigate, analyze, solve problems and their ability to organize and manage work. To promote the students' comprehensive application abilities and to develop</p>				

	generous, complex, and innovative talents.					
课程教学大纲 (Course Syllabus)						
*学习目标 (Learning Outcomes)	<p>1. 通过课外的食品工厂参观与调查实践，提高对食品专业知识的综合认识，深入了解食品生产的工艺过程和特点(A1,A2,A5, B1,B2,B3,C5,D1,D5)。</p> <p>2. 通过产品设计、生产实践、科研调查等，培养学生独立思考和解决问题能力、团队协作能力及分析表达能力。扩大食品专业知识眼界，为专业课学习打下良好基础(A3,A4,B1,B4, C2, C3,C4,D2,D3,D4)。</p> <p>1. By means of extra food factory visits and investigations, enhance the comprehensive understanding of food expertise and in-depth understanding of the process and equipment characteristics of food production(A1,A2,A5, B1,B2,B3,C5,D1,D5).</p> <p>2. Through product design, production practices, scientific research, etc., students can develop independent thinking and problem-solving skills, teamwork skills, and analytical skills. Expand the horizon of food professional knowledge and lay a good foundation for professional class learning(A3,A4,B1,B4, C2, C3,C4,D2,D3,D4).</p>					
*教学内容 进度安排及要求 (Class Schedule & Requirements)	教学内容	学时	教学方式	作业及要求	基本要求	考查方式
	工厂学习 Factory Tour	32	<p>1)现场讲解：用食品工艺学理论分析产品的特征、工艺流程及加工设备的工作原理和应用范围，关键控制点的选择和监控等。</p> <p>2)产品研发：通过市场调研，运用食品化学、食品工艺学、食品工程原理等基本知识点，进行产品设计，使得同学们深入掌握相</p>	<p>1) 实习报告；</p> <p>2) 阐述其关键控制点，主要工艺设备和企业管理等</p> <p>1) Internship report;</p> <p>2) Explains its key control points, processing equipment and corporate management, etc.</p>	<p>1) 听报告，</p> <p>2) 参观学习交流</p> <p>1) Listen to the report</p> <p>2) Visiting tour and communication</p>	实习报告 Internship reports

	食品产品研发及应用 R&D of food products	32	<p>关的理论和技 术。 3)报告分析和撰写：同学们通过产品研发、调查和实习报告的分析与撰写，掌握相关理论和技 术。</p> <p>1)Explanation: Using food technology theory to analyze product features, technological process, working</p>	<p>1)实习报告； 2)汇报 PPT 3)每组至少形成一种产品； 4)个人汇报和提问</p> <p>1) Internship report; 2) PPT; 3) At least one product per group; 4) Personal presentation and Q&amp;A</p>	<p>1) 资料收集、 2) 市场调研、 3) 关键工艺技术参数、 4) 撰写调查报告</p> <p>1) Data collection, 2) market research, 3) key process technical parameters, 4) writing investigation report</p>	<p>1)PPT 汇报 2)个人汇报和提问 3)感官评定 4)实习报告</p> <p>1) PPT presentation 2) Personal presentation and Q&amp;A 3) sensory assessment 4) internship reports</p>
			<p>principle of processing equipment, selection and monitoring of key control points, etc.</p> <p>2) Product R&amp;D: Complete the Product design work through marketing research and the use of basic knowledge such as food chemistry, food technology, and food engineering principles. Enable students to master the relevant theories and techniques.</p> <p>3) Report analysis and writing: The students mastered related theories and</p>			

			techniques through the product development, analysis, surveys, and writing internship reports.			
<b>*考核方式 (Grading)</b>	<p>课程考核内容包括：1) 实习报告评阅 30%；2) 指导教师评分 30%，3) 汇报 30%，4) 出勤 10%</p> <p>The course assessment includes: 1) Internship report 20%; 2) Product creativity 20%; 3) Market prospect 10%; 4) Sensory evaluation 30%; 5) Regular performance 20%.</p>					
<b>*教材或参考资料(Textbooks &amp; Other Materials)</b>	无					
其它 (More)						
备注 (Notes)						

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。