

《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)	AB309	*学时 (Credit Hours)	48	*学分 (Credits)	3
*课程名称 (Course Name)	专业实习（食品科学与工程）				
	Food science and technology practice				
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)	全英文				
*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)	隋中泉 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设备特点 (A5,B2,B3,B7)。</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(A5,B1,B4,B6,B8,B9,B10)。</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(A5,B2,B3,B7).</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(A5,B1,B4,B6,B8,B9,B10).</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
	<p>1)果蔬类饮料产品研发及应用、</p> <p>2)酸奶类产品研发及应用、</p> <p>3)酒精类饮料产品研发及应用、</p> <p>4)面条类产品研发及应用、</p> <p>5)烘焙类食品产品研发及应用</p> <p>1)Development of fruit and vegetable beverage products,</p> <p>2)R&D of yogurt products,</p> <p>3)R&D of alcoholic</p>	36	<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，进行产品设计，使得同学们深入掌握相关的理论和技术。</p> <p>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</p>	<p>1)实习报告；</p> <p>2)每组至少提供 10 张研发过程的照片；</p> <p>3)每组至少形成一种产品；</p> <p>4)产品创意作品（海报）</p> <p>1) Internship report;</p> <p>2) Each group provides at least 10 photos of the R&D process;</p> <p>3) At least one product per group;</p> <p>4) Product creative works (poster)</p>	<p>1) 资料收集、</p> <p>2) 市场调研、</p> <p>3) 关键工艺技术参数、</p> <p>4) 撰写调查报告</p> <p>1) Data collection,</p> <p>2) market research,</p> <p>3) key process technical parameters,</p> <p>4) writing investigation report</p>	<p>1)产品创意、</p> <p>2)产品感官评定、</p> <p>3)市场前景、</p> <p>4)实习报告</p> <p>1)Product ideas,</p> <p>2)product sensory assessment,</p> <p>3) market prospects,</p> <p>4) internship reports</p>

	beverage products, 4) R&D of noodle products, 5) R&D of baked food products		analyze product features, technological process, working principle of processing equipment, selection and			
	工厂参观 Factory Tour	12	monitoring of key control points, etc. 2)Product R&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. 3) Report analysis and writing: The students	1) 实习报告; 2) 每个工厂至少提供 10 张照片, 3) 阐述其关键控制点, 主要工艺设备和企业管理等 1) Internship report; 2) Each factory provides at least 10 photos, 3) Explains its key control points, processing equipment and corporate management, etc.	1) 听报告, 2) 参观学习 1) Listen to the report 2) Visiting tour	实习报告 Internship report
			mastered related theories and techniques through the product development, analysis, surveys, and writing internship reports.			

*考核方式 (Grading)	课程考核内容包括：1) 实习日志 20%；2) 产品创意 20%，3) 市场前景 10%，4) 感官评价 30%，5) 平日成绩 20% The course assessment includes: 1) Internship report 20%; 2) Product creativity 20%; 3) Market prospect 10%; 4) Sensory evaluation 30%; 5) Regular performance 20%.
*教材或参考资料(Textbooks & Other Materials)	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。