

Southwest University

Graduate Course Syllabus

Course Unit: School of Food Science

Course No.	1108320051	Course	Food Machinery								
Course category (√)	Compulsory courses () Elective courses (√)	Credit hour	2	Total class hours	30	Lecture hours	28	Discussion Hours	2	Experiment hours	
Lecturer	Yu Jinchun	Job title Degree	Associate Professor Bachelor degree		Specialties		Food machinery and packaging engineering food processing				
Range of application by majors: agricultural products processing and storage engineering, aquatic products processing and storage engineering and food science and other fields, etc.											
Prerequisite courses: mechanical drawing, mechanical foundation and other mechanical basic courses											
Teaching objectives and requirements: <p style="text-align: center;"><i>"Food Machinery"</i> is a professional elective course set for postgraduates such as processing and storage of agricultural products, processing and storage engineering of aquatic products. The course mainly includes the modern food processing machinery and equipment, automatic food packaging machinery, modern food storage and transportation machinery and equipment and other aspects, the purpose is to enable students having a certain understanding & knowledge of development and the latest progress on food processing, packaging, storage and transportation and other aspects of food manufacturing chain machinery and equipment. The course requires students to understand the development of machinery and equipment in the field of food processing, food packaging and food logistics, and master the structure and working principle of machinery and equipment, and have a deep understanding on machinery performance, which provide more powerful professional and technical support for students in food machinery engineering, who engage in the field of food professional work independently.</p>											

Teaching methods and test methods (it should be conducive to cultivate graduates' innovative thinking and innovation ability):

"*Food Machinery*" includes the classroom teaching as the main way, classroom discussion for supplementary. The multimedia courseware, teaching molds and other teaching methods are used in the classroom to make students understand the content of the lectures easily; for the classroom discussion, the group discussion will be adopted for food machinery.

"*Food Machinery*" course could be used for examination of the large-scale homework or papers written, also for the examination paper.

Course content and course hours allocation

Chapter 1 Food's Modern Processing Machinery and Equipment (14 hours)

1. Pretreatment machinery and equipment for raw material
2. Raw materials and semi - finished products' cold & hot processing machinery and equipment
3. Modern bactericidal machinery and equipment

Chapter 2 Automated Food Packaging Machinery (8 hours)

1. Food's filling machinery
2. Sealing machinery
3. Food's multifunctional packaging machinery

Chapter 3 Modern Food's Storage Machinery and Equipment (6 hours)

1. Food's transportation machinery
2. Food storage sorting machinery and equipment

Class Discussion (2 hours)

(Please add more pages if this page is insufficient)

The Catalog for main reference book (periodicals):

S.N.	Author	Books and Periodicals' name	Press
1	Zhang Yuzhong etc.	Food processing technology and equipment	China Light Industry Press
2	Wuxi Light Industry	Food factory machinery and	China Light Industry Press

	University etc.	equipment	
3	Other food and packaging machinery related books in the library		
Review Comments of School (Institute, Center):			
		Signature	(Date)
Review Comments of Student Committee:			
		Signature	(Date)
Review Comments of Graduate School			
		Signature	(Date)