

# Graduate Course Syllabus

## Course Unit: School of Food Science

Course No.	1108320066		Course Name			Aquatic products science			
Course category (√)	Compulsory courses (√) Elective courses ()	Total class hour	40	Lectures hours	30	Discussion hours	10	Experiment hours	
Lecturer	Shanggui Deng	Job title degree	Professor Doctor degree		Specialties		Food science Aquatic products processing		
Range of application by majors: Master degree candidates in food science and engineering									
Prerequisite courses: <i>Food Chemistry</i> , <i>Food Biochemistry</i> , <i>Microbiology</i> , <i>Principles of food storage</i>									
Teaching objectives and requirements:  <p><i>Aquatic product science</i> is a systematic science that deals with the nature, storage and processing of aquatic animals and plants as food. Through the study of this course, students are required to acquire firmly biochemical and nutritional characteristics of aquatic animals and plants 、 the main causes of aquatic food corruption and preservation principles 、 the changes of meat with the storage and processing and a variety of aquatic products processing principles and other knowledge, in order to fully rational use of aquatic animals and plants resources, to achieve a reasonable reproduction of biological resources and high value of the development and utilization of a solid theoretical basis.</p>									
Teaching and testing methods (it's need to be conducive to cultivating the innovative thinking and ability of graduate students) Course teaching is the main method, and student discussion is the supplementary method. This course adopts examination method to evaluate the result. The assessment results include three parts: classroom questioning, classroom discussion and course review.									

## Course contents and class hours allocation

Chapter I Introduction (1 class hours)
Chapter II Composition of muscle in fish and shellfish (2 class hours)
Section I Composition of muscle in fish
Section II Muscle tissue of mollusks
Chapter III Main components of muscle in fish and shellfish (1 course hour)
Chapter IV The color and aroma of fish and shellfish (2 class hours)
Section I Color of fish and shellfish
Section II Taste of fish and shellfish
Section III The smell of fish and shellfish and shrimp
Chapter V Postmortem changes in fish and shellfish (2 class hours)
Section I Rigor mortis
Section II Solution hardening and autolysis
Section III Abnormal changes after death
Section IV Corruption
Chapter VI Microorganism and its development and inhibition
Chapter VII Freshness discrimination method (2 class hours)
Chapter VIII Food poisoning (2 class hours)
Chapter IX Aquatic processing raw materials (2 class hours)
Chapter X Meat quality changes during storage and processing (2 class hours)
Chapter XI A variety of aquatic products and its processing principles
Section I Frozen aquatic products
Section II Dried products
Section III Smoked products (2 class hours)
Section IV Salted products (2 class hours)
Section V Flavoring processed products (2 class hours)
Section VI Surimi products (4 class hours)
Section VII Canned food
Section VIII Seaweed and its products (2 class hours)
Section X Other aquatic products (4 class hours)
Classroom discussion I: The reason why aquatic animals and plants are more prone to decay than land animals and plants (3 class hours)
Classroom discussion II: Approaches and prospects of high value development and utilization of aquatic products (3 class hours)
Classroom discussion III: Quality and safety of aquatic food (3 class hours)

### The Catalog for main reference book (periodicals):

S.N.	Author	Books and Periodicals?	Press
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		name	
1	Xu Shan Sanqiansan	Aquatic food science	Shanghai Scientific & Technical Publishers
2		Journal of Fisheries of China	Chinese Fisheries Society
3		Food Chemistry	Elsevier SCI Ltd
4		Food science	Journal of Food Science
5		Food and Fermentation Industries	Journal of food and fermentation industry
6		Fisheries Abstracts	Journal of Fisheries Abstracts

Review Comments of School (Institute, Center):

Signature (Date)

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Signature (Date)