



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Meat Science							
Course Code		VBH605		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	5	Workload	131 (<i>Hours</i>)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		To teach the consistence and chemical reactions occurring meat. To evaluate carcass grading, valuable meat portions and meat products production.							
Course Content		The description and the types of meat. Histological structure of meat and tissues related with muscle. postmortem changes, maturation and abnormal postmortem changes occurring in meat. Meat quality parameters. Factors affecting meat quality. Meat products technologies, equipment, starter cultures, casings and process chain for production. Cleaning and sanitation. HACCP im meat industry.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Discussion					
Name of Lecturer(s)		Prof. Ergün Ömer GÖKSOY							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Yıldırım, Y. (1996). Et endüstrisi, Ankara.
2	Arslan, A. (2002). Et teknolojisi, Ankara.
3	Lawrie's Meat Science
4	Meat Handbook
5	Meat Hygiene

Week	Weekly Detailed Course Contents	
1	Theoretical	Decription of meat; physical, chemical, hystological and physiological features of meat .
	Practice	Introduction for laboratory work
2	Theoretical	Conversion of muscle to meat, post-mortem biochemical and biophysical changes occurring in the muscle.
	Practice	Practice in chemical meat analysis
3	Theoretical	Conversion of muscle to meat, post-mortem biochemical and biophysical changes occurring in the muscle.
	Practice	Practice in physical meat analysis
4	Theoretical	Eat quality features
	Practice	Practice in microbiological meat analysis
5	Theoretical	Meat preservation methods
	Practice	Practice in histological meat analysis
6	Theoretical	Meat preservation methods
	Practice	Microbiological analysis in determining spoilage of meat
7	Theoretical	Cleaning and disinfection in meat industry
	Practice	Chemical analysis in determining spoilage of meat
8	Intermediate Exam	Midterm exam
9	Theoretical	Basic equipment used in meat industry, additives.
	Practice	Introduction to meat industry equipment, main materials and additives.
10	Theoretical	Sucuk technology
	Practice	Production of Sucuk (a traditional fermented soudjouk)
11	Theoretical	Emulsified meat products
	Practice	Production of emulsified meat products
12	Theoretical	Production of Pastırma
	Practice	Pastırma production



13	Theoretical	Corned beef technology
	Practice	Corned beef technology
14	Theoretical	Canned and dry meat technology
	Practice	Dry meat production
15	Theoretical	Doner and other meat products
	Practice	Doner production
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Assignment	14	0	1	14
Reading	14	0	1	14
Midterm Examination	1	15	1	16
Final Examination	1	30	1	31
Total Workload (Hours)				131
[Total Workload (Hours) / 25*] = ECTS				5

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Students learn the description and the types of meat together with histological, physical, chemical and microbiological features of meat.
2	Learn the mechanism of conversion of muscle to meat, post-mortem biochemical and biophysical changes occurring in the muscle. Combine knowledge with meat quality parameters.
3	Have detailed knowledge about meat quality parameters
4	Know meat products technologies, equipment, starter cultures, casings and process chain for production
5	Know sanitation and cleaning procedures and HACCP process in meat industry.

Programme Outcomes (Food Hygiene and Technology (Veterinary Medicine) Doctorate)

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Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5
P1	4	5	5	5	5
P2				5	5
P3	5	5	5	5	5
P4				5	5
P5	5	5	5	5	
P6				5	
P7		5		5	5
P8	5	5	5	5	
P9				5	5



P10			5	5	
P11				5	
P12	5	5		5	
P13	5	5	5	5	5

