

HARRAN UNIVERSITY DEPARTMENT OF ANIMAL SCIENCE

Course name	Course code	Semester	Teoric+application	Credit	ACTS
Energy and protein feeding	5116226	2	3+0	3	6
Prerequisite courses					
Course language		Turkish- English			
Type of course		Obligatory			
Course coordinator		Sabri YURTSEVEN			
The instructor					
Helpers of the course					
The aim of the course	This course provides information on a wide range of energy and protein resources, including concentrate, grasslands, plant and animal by-products, meal as well as other vegetable crops, fruit crops, and animal wastes, for animals. This course provides many new developments and insights on nitrogen and energy nutrition for the students and summarize the more recent publications in the field is especially needed for students as well as for extension people, consultants, and producers of cattle and sheep.				
Learning outcomes of the course	At the end of this course; the student; 1- Will have knowledge about energy and protein sources 2- Can learn the concept of energy and protein requirements of animals 3- Can learn energy and protein metabolism				
Course content	This course gives research and development on various nitrogen and energy feedstuffs and defines terminology commonly utilized in nitrogen and energy nutrition.				
Weeks	Topics				
1	Feed intake				
2	Rumen microbes				
3	Factors influencing energy and protein degradation				
4	Degradation of nutrients				
5	Protein synthesis in rumen				
6	Efficiency of energy utilization by microbes				
7	Mid-term exam				
8	Acidosis syndrome and performance of ruminants				
9	Starting cattle on concentrate diets				
10	Rumen fermentation manipulation				
11	Gluconeogenesis				
12	Nutritional and energy terms				
13	Fermentation pathways				
14	Net energy systems				
Generic competences					
The students understand the energy and protein requirements of animals, and prepare balanced ration for cattle or sheep. They learn energy and protein sources.					
Sources					
Ray l. Shirley. 1986. Nitrogen and energy nutrition of ruminants. In :Animal feeding and nutrition Tony J. Cunha (Ed.) University of Florida Gainesville, Florida					
Course evaluation system					
Mid-term exam : % 40					
Final : % 60					
Projects :					
Homeworks :					

HARRAN UNIVERSITY DEPARTMENT OF ANIMAL SCIENCE

Course name	Course code	Semester	Teoric+application	Credit	ACTS
The ways of Improving Turkey's Animal Husbandry	5116228	2	3+0	3	6
Prerequisite courses					
Course language					
Turkish- English					
Type of course					
Obligatory					
Course coordinator					
Sabri YURTSEVEN					
The instructor					
Helpers of the course					
The aim of the course	The aim of this course is to reveal the animal resources of Turkey, the current situation, the problems. This course provides information on a wide range of animal production including meat, milk, cattle, water buffalo, goat and sheep as well as other livestock animals such as poultry production. This course provides many new developments and insights on animal production for the students. It summarizes the problems and suggestions for solutions in the field are especially needed for students as well as for extension people, consultants, and producers of cattle and sheep.				
Learning outcomes of the course	At the end of this course; the student; 1- Will have knowledge about animal resources of Turkey 2- Can learn the problems of animal production and solution ways				
Course content	This course gives research and development on various animal populations and defines terminology commonly utilized in animal production of Turkey.				
Weeks	Topics				
1	The change of animal existence according to years in Turkey				
2	The situation of Turkey's cattle production				
3	The situation of Turkey's sheep production				
4	The problems of cattle production in Turkey				
5	The problems of small ruminant production in Turkey				
6	Cattle breeding of Turkey in the future				
7	Mid-term exam				
8	The General Situation of Small ruminant Breeding in Turkey				
9	The situation of Turkey's animal feed production				
10	Forage production in turkey and its problems				
11	Animal Disease Problem in Turkey and New Model Proposals				
12	The problems of poultry production in Turkey				
13	Problems of poultry feed production in Turkey				
14	Animal import and export problems in Turkey				
Generic competences					
The students understand the population of animals in Turkey, and prepare solution proposal for problems.					
Sources					
Arif SEMERCİ Ahmet Duran ÇELİK 2016. Türkiye'de Küçükbaş Hayvan Yetiştiriciliğinin Genel Durumu. Mustafa Kemal Üniversitesi Ziraat Fakültesi Dergisi. Journal of Agricultural Faculty of Mustafa Kemal University. 21(2):182-196					
Ahmet ALÇİÇEK, Asım KILIÇ, Veysel AYHAN, Mürsel ÖZDOĞAN, Türkiye'de kaba yem üretimi ve sorunları. Ege Üniversitesi Ziraat Fakültesi Zootekni Bölümü, Bornova-İzmir					
Berrin ŞENTÜRK. 2015. Türkiye'de Salgın Hayvan Hastalık Sorunu ve Yeni Model Önerileri. Harran Üniv Vet Fak Derg, 4(1) 27-29					
Mehmet SOYTÜRK, Sabri YURTSEVEN. 2016. İthalat ve İhracat Uygulamalarının Türkiye Hayvancılığına Etkileri. Yüksek lisans semineri "Harran Üniversitesi Yemler Ve Hayvan Besleme A.B.D. Şanlıurfa.					
Course evaluation system					
Mid-term exam : % 40					
Final : % 60					
Projects :					
Homework :					

HARRAN UNIVERSITY DEPARTMENT OF ANIMAL SCIENCE

Course name	Course code	Semester	Teoric+application	Credit	ACTS
Preparing a ration formulation on computer	5116105	1	3+0	3	6
Prerequisite courses					
Course language					
Turkish- English					
Type of course					
Obligatory					
Course coordinator					
Sabri YURTSEVEN					
The instructor					
Helpers of the course					
The aim of the course					
The aim of this course is to prepare balanced feed formulations for continuation of life, growth, reproduction, yields and other activities. The other aim of this course is to teach definition of feed and ration. This course provides many new developments on animal ration formulations for the students.					
Learning outcomes of the course					
At the end of this course; the student; 1- will have knowledge about feed and ration 2- can learn to make balanced ration formulations for animal production with computer help.					
Course content					
This course gives research and development on various ration solutions and defines energy and protein feeds for balancing ration solution					
Weeks	Topics				
1	Why Animals Need Nutrients				
2	Nutrients necessary for the continuation of life				
3	Definition of feed, mixed feed and ration				
4	Classification of Feeds				
5	Forages and concentrate feeds				
6	Animal feed additives				
7	Mid-term exam				
8	Nutrient Cost and ration formulation				
9	Characteristics of Feed Raw Materials and Ration Preparation				
10	Ration Preparation Principles				
11	Using excel in ration preparation				
12	Determination of nutrient requirements				
13	Preparing ration for beef cattle or dairy cattle				
14	Preparing ration for poultry and sheep				
Generic competences					
The students understand the formulation of balanced ratio, and prepare solution proposal for problems.					
Sources					
Kutlu, H.R., Görgülü, M., Çelik, L.B. 2003. Genel hayvan besleme. Çukurova Üni. Ziraat F. Yemler ve Hayvan Besleme Anabilim Dalı Adana					
Görgülü, M. 2003. Büyük baş ve küçükbaş hayvan besleme. Çukurova Üni. Ziraat F. Yemler ve Hayvan Besleme Anabilim Dalı Adana					
Course evaluation system					
Mid-term exam : % 40					
Final : % 60					
Projects :					
Homework :					

HARRAN UNIVERSITY DEPARTMENT OF ANIMAL SCIENCE

Course name	Course code	Semester	Teoric+application	Credit	ACTS
Poultry nutrition	5116109	1	3+0	3	6
Prerequisite courses					
Course language		Turkish- English			
Type of course		Obligatory			
Course coordinator		Sabri YURTSEVEN			
The instructor					
Helpers of the course					
The aim of the course	Poultry farming, especially egg chicken and broiler chickens production in our country has a considerable share in animal production. The feedstuff in poultry is the largest cost element with a share of 70-75% in total input. For this reason, This course provides to know the characteristics of the digestive physiology of chickens, basic nutrients, metabolism, feed sources, feeding, breeding direction and environment of the chickens for rational feeding in poultry farming.				
Learning outcomes of the course	At the end of this course; the student; 1- Will have knowledge about energy and protein requirement of broiler chicken and laying hens 2- Can learn the concept of poultry digestive systems 3- Can learn to make optimum ration composition				
Course content	This course gives research and development on poultry nutrition and energy feedstuffs and defines terminology commonly utilized in poultry especially broiler chicken and laying hens.				
Weeks	Topics				
1	Digestion in poultry animals				
2	Basic nutritional materials and metabolism				
3	Nutrient requirements and feeding of poultry				
4	Energy and protein				
5	Vitamin and minerals				
6	Feed additives				
7	Mid-term exam				
8	Nutritional characteristics of chickens				
9	Feeding of laying hens				
10	Feeding broilers				
11	Other requirements related to feed and feed				
12	Diseases related to feed-nutrition and metabolism				
13	Preparing a ration for poultry				
14	Preparing a ration for poultry				
Generic competences					
The students understand the energy and protein requirements of hens, and prepare balanced ration for chicken and hens. They learn energy and protein sources.					
Sources					
Kutlu, H.R. 2015. Kanatlı hayvan besleme. Çukurova Üniversitesi Ziraat Fakültesi Zootečni Bölümü. Yemler ve Hayvan Besleme Anabilim Dalı. Adana Blair, R. 2008. Nutrition and feeding of Organic Poultry. UK					
Course evaluation system					
Mid-term exam : % 40					
Final : % 60					
Projects :					
Homeworks :					