

## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

| Course Title                                     |  | Feed Intake a   | nd Affecting F | actors      |                 |                                |                     |                  |  |  |
|--|--|---|----------------|-------------|-----------------|--------------------------------|---------------------|------------------|--|--|
| Course Code                                      |  | VHB628  |                | Couse Level |                 | Third Cycle (Doctorate Degree) |                     |                  |  |  |
| ECTS Credit 6 Workload 147 (Hours)               |  | Theory  |                | 1           | Practice        | 2                              | Laboratory          | 0                |  |  |
| Objectives of the Course Feed consumption mech   |  | ption mechani   | isms in d      | liffere     | nt animal       | species. Facto                 | ors effecting       | feed consumption |  |  |
| Course Content                                   |  | Feed consumption mechanisms in different animal species. Factors effecting feed consumption.  Digestibility in feeds. Effects of stress factors on feed consumption. Effects of factors related to animal metabolism and physiology. Negative effects of antinutritional factors and organoleptic characteristics of feeds on feed consumption. |                |             |                 |                                |                     |                  |  |  |
| Work Placement N/A                               |  |   |                |             |                 |                                |                     |                  |  |  |
| Planned Learning Activities and Teaching Methods |  | Explana<br>Problen  |                |             | tion), Discussi | on, Case St                    | udy, Individual Stu | ıdy,             |  |  |
| Name of Lecturer(s)                              |  |   |                |             |                 |                                |                     |                  |  |  |

| Assessment Methods and Criteria |          |                |  |  |  |  |
|---------------------------------|----------|----------------|--|--|--|--|
| Method                          | Quantity | Percentage (%) |  |  |  |  |
| Midterm Examination             | 1        | 28             |  |  |  |  |
| Final Examination               | 1        | 60             |  |  |  |  |
| Assignment                      | 10       | 12             |  |  |  |  |

| Reco | Recommended or Required Reading  |  |  |  |  |  |
|------|--|--|--|--|--|--|
| 1    | Forbes, J.M. (1995) Voluntary Food Intake and Diet Selection in Farm Animals, CAB International, Bristol, England.             |  |  |  |  |  |
| 2    | VanSoest, P.J. (1994) Nutritional Ecology of the Ruminnat, Cornell Universty Press, London.                                    |  |  |  |  |  |
| 3    | Young, B.A. (1981) Effect of Environment on Nutrient Requirements of Domestic Animals, National Academy Press, Washington D.C. |  |  |  |  |  |
| 4    | Cheeke, P.R. (1999) Applied Animal Nutrition: Feeds and Feeding, Prentice Hall International, USA.                             |  |  |  |  |  |

| Week | <b>Weekly Detailed Cour</b> | se Contents   |  |  |  |  |
|------|-----------------------------|---|--|--|--|--|
| 1    | Theoretical                 | Feed consumption mechanisms in animals. Explanation of hunger, fullness, palatability and appetite.             |  |  |  |  |
|      | Practice                    | Literature research on factors effecting feed consumption.  |  |  |  |  |
| 2    | Theoretical                 | Animal and raisin conditions related factors effecting feed consumption.  |  |  |  |  |
|      | Practice                    | Discussion of factors effecting feed consumption in poultry.  |  |  |  |  |
| 3    | Theoretical                 | Factors effecting regulation (chemostatic, thermostatic, lipostatic, hormonal regulations) of feed consumption. |  |  |  |  |
|      | Practice                    | Literature research on factors effecting feed consumption in ruminants.   |  |  |  |  |
| 4    | Theoretical                 | Evaluation of effects of feeding methods on feed consumption.   |  |  |  |  |
|      | Practice                    | Discussion on controlling feed consumption and feed selection mechanisms.                                       |  |  |  |  |
| 5    | Theoretical                 | Factors originated from feeds effecting feed consumption.   |  |  |  |  |
|      | Practice                    | Digestibility ratio of feeds. Aims of digestibility trials. Literature search on related subject.               |  |  |  |  |
| 6    | Theoretical                 | Evaluation of the effects of form and composition of feeds on feed consumption.                                 |  |  |  |  |
|      | Practice                    | Discussion on feed selection in ruminants.  |  |  |  |  |
| 7    | Theoretical                 | Thermal zone and termal regions in animals.   |  |  |  |  |
|      | Practice                    | Effects of heat stress on physiological systems.  |  |  |  |  |
| 8    | Practice                    | Evaluation of exam papers.  |  |  |  |  |
|      | Intermediate Exam           | Midterm exam  |  |  |  |  |
| 9    | Theoretical                 | Effects of heat stress on nutrient requirements of animals.   |  |  |  |  |
|      | Practice                    | Feeding of poultry under heat stress. Practical regulations for preventing negative effects of heat stress.     |  |  |  |  |
| 10   | Theoretical                 | Feeding of ruminants under heat stress.   |  |  |  |  |
|      | Practice                    | Usage of feed additives in feeding of heat stressed animals.  |  |  |  |  |
| 11   | Theoretical                 | Effects of organoleptic characteristics (taste, smell, palatability and colour) of feeds on feed consumption.   |  |  |  |  |



| 11 | Practice    | Discussion on the effects of lightening on feed consumption and evaluation of literatures.    |  |  |  |  |
|----|-------------|---|--|--|--|--|
| 12 | Theoretical | Effects of climate (humidity and temperature) on feed consumption.                            |  |  |  |  |
|    | Practice    | Relationship between digestive system capacity and feed consumption – utilization.            |  |  |  |  |
| 13 | Theoretical | Antinutritional factors existing in feeds and their negative effects on feed consumption.     |  |  |  |  |
|    | Practice    | Effects of physiological status (growth, pregnancy, lactation) of animal on feed consumption. |  |  |  |  |
| 14 | Theoretical | General subject repetition, determination home assignment subject.                            |  |  |  |  |
|    | Practice    | Factors effecting water consumption. Relationship between performance and water quality.      |  |  |  |  |
| 15 | Theoretical | General subject repetition. Giving homework assignment  |  |  |  |  |
|    | Practice    | Homework presentation.  |  |  |  |  |
| 16 | Practice    | Evaluation of exam results.   |  |  |  |  |
|    | Final Exam  | Final exam  |  |  |  |  |

| Workload Calculation                           |          |             |          |                |  |
|--|----------|-------------|----------|----------------|--|
| Activity                                       | Quantity | Preparation | Duration | Total Workload |  |
| Lecture - Theory                               | 1        | 14          | 1        | 15             |  |
| Lecture - Practice                             | 15       | 0           | 2        | 30             |  |
| Assignment                                     | 10       | 2           | 1        | 30             |  |
| Reading  | 14       | 0           | 3        | 42             |  |
| Midterm Examination                            | 1        | 12          | 1        | 13             |  |
| Final Examination                              | 1        | 16          | 1        | 17             |  |
| Total Workload (Hours) 147                     |          |             |          |                |  |
| [Total Workload (Hours) / 25*] = <b>ECTS</b> 6 |          |             |          |                |  |
| *25 hour workload is accepted as 1 ECTS        |          |             |          |                |  |

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|          |            |          |     |       |

## **Learning Outcomes**

- 1 Learning factors effecting feed consumption.
- 2 Understanding factors changing feed consumption in animal feeding.
- 3 Balanced nutrition.
- 4 Effects of heat stress on physiological systems.
- 5 Evaluation of effects of feeding methods on feed consumption.

## Programme Outcomes (Animal Nutrition and Nutritional Diseases (Veterinary Medicine) Doctorate)

- 1 Knows information about importance of forage and concentrates in basic animal nutrition for protecting animal health in scientific and technological animal production.
- Have ability to formulate economical and full-satisfactory rations with considering product quality and health. May inform animal producers about practical/appropriate feeding methods.
- 3 Can adapt to recent scientific and technological developments in animal nutrition easier and produce proper strategies against to problems on this field.
- 4 Knows the properties of feeds used in proper and economical rations formulated due to needs of animal species.
- 5 Can give information to animal producers about properties of common feedstuffs used in Turkey
- 6 Knows organoleptic, physical diagnostic and chemical analysis methods used in determining feed quality.
- 7 Have information about processing and the effects of processing on animal yield.
- 8 Can identify the term "feed hygiene" and have information about the usage availability of contaminated feedstuffs.
- 9 Can apply the informations related to feed additives in a proper way.
- 10 Understands the results and factors decreasing production.
- 11 Knows the nutrition related diseases and their solution recommendations which may be applied in feeding or formulating feeds for preventing nutritional diseases.
- 12 Knows about the availability level of feedstuffs after consumed and can perform digestibility trials.
- 13 Knows the definition of stress, stress sources and effects on health and production level of animals.
- Have sufficient information on classification, activation and fermentation of rumen microorganisms plus carbohydrate, lipid and protein digestibility.
- 15 Knows the factors effecting feed intake and negative factors in feedstuffs and preventation of them.
- 16 Comments on feeding behaviours and related yield parameters.
- 17 Have information on basic terms related to feed legislation, feeds used in animal nutrition and their legal regulations.
- 18 Have information about biotechnological research conducted on feeds and animal nutrition.



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

|     | L1 | L2 | L3 |
|-----|----|----|----|
| P1  | 5  | 5  | 5  |
| P2  |    |    | 5  |
| P3  | 5  | 5  |    |
| P4  |    |    | 5  |
| P5  |    |    | 5  |
| P12 | 5  | 5  |    |
| P15 | 5  | 5  |    |

