|      | DAIRY  | CAT  | TLE NUTRITION  |  |  |  |  |  |  |
|------|--|--|--|--|--|--|--|--|--|
| 1    | Course Title:  | DAIRY (  | CATTLE NUTRITION   |  |  |  |  |  |  |
| 2    | Course Code:   | ZTK520   | 4  |  |  |  |  |  |  |
| 3    | Type of Course:  | Optional   |  |  |  |  |  |  |  |
| 4    | Level of Course:   | Second   | Cycle  |  |  |  |  |  |  |
| 5    | Year of Study:   | 1  |  |  |  |  |  |  |  |
| 6    | Semester:  | 2  |  |  |  |  |  |  |  |
| 7    | ECTS Credits Allocated:                                    | 6.00   |  |  |  |  |  |  |  |
| 8    | Theoretical (hour/week):                                   | 3.00   |  |  |  |  |  |  |  |
| 9    | Practice (hour/week):                                      | 0.00   |  |  |  |  |  |  |  |
| 10   | Laboratory (hour/week):                                    | 0  |  |  |  |  |  |  |  |
| 11   | Prerequisites:   | None   |  |  |  |  |  |  |  |
| 12   | Language:  | Turkish  |  |  |  |  |  |  |  |
| 13   | Mode of Delivery:  | Face to  | face   |  |  |  |  |  |  |
| 14   | Course Coordinator:  | Prof. Dr.  | İsmail FİLYA   |  |  |  |  |  |  |
| 15   | Course Lecturers:  |  |  |  |  |  |  |  |  |
| 16   | Contact information of the Course Coordinator:             | Bursa Uludağ Üniversitesi Ziraat Fakültesi Zootekni Bölümü,<br>Görükle Kampüsü 16059 Bursa/TÜRKİYE<br>ifilya@uludag.edu.tr, 0 224 2941555  |  |  |  |  |  |  |  |
| 17   | Website:   |  |  |  |  |  |  |  |  |
| 18   | Objective of the Course:                                   | To give descriptive information about dairy cows at different age and physiological state of living to sustain themselves and provide the basic nutrients needed to export data from the feeding programs. |  |  |  |  |  |  |  |
| 19   | Contribution of the Course to<br>Professional Development: | Learn about the nutrition of dairy cows.   |  |  |  |  |  |  |  |
| 20   | Learning Outcomes:   |  |  |  |  |  |  |  |  |
|      |  | 1  | Recognizes the anatomy and physiology of dairy cows.                                     |  |  |  |  |  |  |
|      |  | 2  | Determines nutrient requirements of dairy cows of different age and physiological state. |  |  |  |  |  |  |
|      |  | 3  | Categorizes feeds and additives used for feeding dairy cows.                             |  |  |  |  |  |  |
|      |  | 4  | Discusses the nutrient requirements of high producing dairy cows.                        |  |  |  |  |  |  |
|      |  | 5  | Compares feeding programs as may be appropriate at the regional level with each other.   |  |  |  |  |  |  |
|      |  | 6  | Analyses Diseases of dairy cows due to feeding level with each other.                    |  |  |  |  |  |  |
|      |  | 7  |  |  |  |  |  |  |  |
|      |  | 8  |  |  |  |  |  |  |  |
|      |  | 9  |  |  |  |  |  |  |  |
|      |  | 10   |  |  |  |  |  |  |  |
| 21   | Course Content:  |  |  |  |  |  |  |  |  |
|      |  | Co   | ourse Content:   |  |  |  |  |  |  |
| Week |  |  | Practice   |  |  |  |  |  |  |
| 1    | Anatomy and physiology of digestive                        | tract  |  |  |  |  |  |  |  |
| 2    | Nutrient requirements of animals                           |  |  |  |  |  |  |  |  |
| 3    | Nutritive value of pasture                                 |  |  |  |  |  |  |  |  |

| 4                 | Ensiling   | mater     | ial and  | didea   | l silage |        |     |     |   |           |      |        |          |      |                           |      |  |  |  |
|-------------------|--|-----------|----------|---------|----------|--------|-----|-----|---|-----------|------|--------|----------|------|---------------------------|------|--|--|--|
| 5                 | Forages and chemical composition                                     |           |          |         |          |        |     |     |   |           |      |        |          |      |                           |      |  |  |  |
| 6                 | Concen   | trated    | and c    | hemic   | al com   | positi | on  |     |   |           |      |        |          |      |                           |      |  |  |  |
| 7                 | Self Fee   | eding, I  | Predic   | ting of | f feed ı | ntake  |     |     |   |           |      |        |          |      |                           |      |  |  |  |
| 8                 | Yem ka   |           |          |         |          |        |     |     |   |           |      |        |          |      |                           |      |  |  |  |
| 9                 | Total mi   | xed ra    | tion     |         |          |        |     |     |   |           |      |        |          |      |                           |      |  |  |  |
| 10                | Feeding  | the da    | airy co  | w dur   | ing lac  | tation |     |     |   |           |      |        |          |      |                           |      |  |  |  |
| 11                | Feeding  | the da    | airy co  | w dur   | ing dry  | perio  | d   |     |   |           |      |        |          |      |                           |      |  |  |  |
| 12                | Cow nu   | trition p | orior to | calvi   | ng       |        |     |     |   |           |      |        |          |      |                           |      |  |  |  |
| 13                | Cow nutrition prior to calving  Feeding the high producing dairy cow |           |          |         |          |        |     |     |   |           |      |        |          |      |                           |      |  |  |  |
| 14                | Nutritional and metabolic disorders                                  |           |          |         |          |        |     |     |   |           |      |        |          |      |                           |      |  |  |  |
| 22                | Materials:   |           |          |         |          |        |     |     | Ensminger, M.E., Oldfield, J.E., Heinemann, W.W. 1990. Feeds and Nutrition. Second Edition. The Ensminger Publishing Company, CA, USA. Mc.Donald, P., Edwards, R.A., Greenhalgh, J.F.D., Morgan, C.A., Sinclair, L.A., Wilkinson, R.G. 2011. Animal Nutrition. Seventh Edition. Pearson, UK. Wu, G. 2018. Principles of Animal Nutrition. CRC Press, Taylor and Francis Group, NW, USA. |           |      |        |          |      |                           |      |  |  |  |
| 23                | Assesm   | ent       |          |         |          |        |     |     |   |           |      |        |          |      |                           |      |  |  |  |
| TERM L            |  |           |          |         |          |        |     |     |   | WEIGHT    |      |        |          |      |                           |      |  |  |  |
| Activit           | Activites  |           |          |         |          |        |     |     | Numb  | er        |      | Dura   | tion (   | ,    | Total Work<br>Load (hour) |      |  |  |  |
| Home A            | work-pro   | ect       |          |         |          | 2      | 2   | 40  | 40,40 3.00  |           |      |        |          |      | 42.00                     |      |  |  |  |
| Practica          | als/Labs   |           |          |         |          |        |     |     | )   |           |      | 0.00   | 0.00     |      |                           | 0.00 |  |  |  |
| Total<br>Self stu | ıdy and p  | repera    | ation    |         |          | 3      | 5   | 110 | P000  |           |      | 7.00   |          |      | 70.00                     |      |  |  |  |
| Homew             |  | <u> </u>  | `        |         |          |        |     | 1   | )   |           |      | 0.00   | 0.00     |      |                           | 0.00 |  |  |  |
| Project           |  |           |          |         |          |        |     |     |   |           |      | 24.00  |          |      | 24.00                     |      |  |  |  |
| Field S           | ets<br>ibution of Final Exam to Success Grade<br>Studies             |           |          |         |          |        |     |     |   |           |      | 4.00   |          |      | 4.00                      |      |  |  |  |
| Total<br>Midtern  | m exams  |           |          |         |          |        |     |     |   | 0.00 0.00 |      |        |          |      | 0.00                      |      |  |  |  |
| Others            |  |           |          |         |          |        |     |     |   | 0         |      |        |          |      | 0.00                      |      |  |  |  |
| Final E           | EKAMS / WORK LOAD TABLE  |           |          |         |          |        |     |     |   | 1         |      |        |          |      | 40.00                     |      |  |  |  |
| Total W           | Il Work Load   |           |          |         |          |        |     |     |   |           |      |        |          |      | 180.00                    |      |  |  |  |
| Total w           | al work load/ 30 hr  |           |          |         |          |        |     |     |   |           |      |        |          |      | 6.00                      |      |  |  |  |
| ECTS (            | TS Credit of the Course  |           |          |         |          |        |     |     |   | 6.00      |      |        |          |      |                           |      |  |  |  |
| 25                |  |           | CON      | TRIE    | BUTIC    | N O    |     |     |   | OUTO      |      | S TO I | PROC     | SRAM | ME                        |      |  |  |  |
|                   | PQ1  | PQ2       | PQ3      | PQ4     | PQ5      | PQ6    | PQ7 | PQ8 | PQ9   | PQ1<br>0  | PQ11 | PQ12   | PQ1<br>3 | PQ14 | PQ15                      | PQ16 |  |  |  |
| ÖK1               | 5  | 0         | 0        | 0       | 0        | 0      | 0   | 0   | 0   | 0         | 0    | 0      | 0        | 0    | 0                         | 0    |  |  |  |
| ÖK2               | 5  | 5         | 0        | 0       | 3        | 4      | 0   | 0   | 0   | 0         | 0    | 0      | 0        | 0    | 0                         | 0    |  |  |  |
| ÖK3               | 5  | 5         | 4        | 0       | 4        | 0      | 0   | 0   | 0   | 0         | 0    | 0      | 0        | 0    | 0                         | 0    |  |  |  |
| ÖK4               | 5  | 0         | 0        | 4       | 0        | 0      | 0   | 0   | 0   | 0         | 0    | 0      | 0        | 0    |                           |      |  |  |  |
|                   | -  | •         |          |         |          | _      |     | _   | •   | •         |      |        |          |      | -                         |      |  |  |  |

| ÖK5   | 2 | 5 | 0 | 0     | 4 | 4   | 0    | 0  | 0      | 0 | 0 | 0           | 0 | 0 | 0 | 0 |
|---|---|---|---|-------|---|-----|------|----|--------|---|---|-------------|---|---|---|---|
| ÖK6 3 4 4 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |   |   |   |       |   |     |      |    |        |   |   |             |   |   |   |   |
| Contrib 1 very low ution Level:             |   |   | 2 | 2 low |   | 3 1 | Medi | um | 4 High |   |   | 5 Very High |   |   |   |   |