

FOOD MICROBIOLOGY

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| 1 | Course Title: | FOOD MICROBIOLOGY |
| 2 | Course Code: | VET4517 |
| 3 | Type of Course: | Optional |
| 4 | Level of Course: | First Cycle |
| 5 | Year of Study: | 4 |
| 6 | Semester: | 7 |
| 7 | ECTS Credits Allocated: | 3.00 |
| 8 | Theoretical (hour/week): | 1.00 |
| 9 | Practice (hour/week): | 2.00 |
| 10 | Laboratory (hour/week): | 0 |
| 11 | Prerequisites: | None |
| 12 | Language: | English |
| 13 | Mode of Delivery: | Face to face |
| 14 | Course Coordinator: | Prof. Dr. AYŞEGÜL EYİĞÖR |
| 15 | Course Lecturers: | None |
| 16 | Contact information of the Course Coordinator: | e-mail: aeyigor@uludag.edu.tr phone: 02242941334 adress: Uludağ University Faculty of Veterinary Medicine Department of Food Hygiene and Technology 16059 Görükle Campus Bursa |
| 17 | Website: | http://veteriner.uludag.edu.tr |
| 18 | Objective of the Course: | To give information on food microbiology applications |
| 19 | Contribution of the Course to Professional Development: | |
| 20 | Learning Outcomes: | |
| | 1 | Learns about general food microbiology rules. |
| | 2 | Learns laboratory equipment and material used in food microbiology applications. |
| | 3 | Gains knowledge on the analysis of microorganisms important for food. |
| | 4 | Learns media and types of media. |
| | 5 | Lerns ingredients of media, their importance, preparation and the important factors during preparation. |
| | 6 | Learns sterilization types, importance, area of use. |
| | 7 | Learns about sampling in microbiological analysis, homogenization, dilution and incubation. |
| | 8 | Learns basic microbiological analyses and interpretation of their results. |
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| 21 | Course Content: | |
| | Course Content: | |
| Week | Theoretical | Practice |
| 1 | Introduction to course and general information | Introduction to laboratory practices |
| 2 | Food microbiology laboratory: basic rules | Presentation of general laboratory practices I |

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| 3 | Media preparation introduction | Presentation of general laboratory practices II |
| 4 | Media ingredients I | Laboratory equipment: use, preparation, cleaning I |
| 5 | Media ingredients II | Laboratory equipment: use, preparation, cleaning II |
| 6 | Media ingredients III | Wighing media, calculation based on final volume |
| 7 | Media types, media preparation I | Media preparation I |
| 8 | Media types, media preparation II | Media preparation II |
| 9 | Media types, media preparation III | Media preparation III |
| 10 | Sterilization I | Media sterilization I |
| 11 | Sterilization II | Media sterilization II |
| 12 | Sampling, homogenization, dilution, plating and incubation | Sampling from different food types, homogenization, dilution, plating and incubation I |
| 13 | Microbiological analysis methods I | Sampling from different food types, homogenization, dilution, plating and incubation II |
| 14 | Microbiological analysis methods II | Sampling from different food types, homogenization, dilution, plating and incubation III |

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| 22 | Textbooks, References and/or Other Materials: | 1.Gıda mikrobiyolojisi uygulamaları, Prof Dr. Kadir Halkman, 2005 2. Gıda Hijyeni ve Mikrobiyolojisi, İrfan Erol, 2007 3. Gıdaların mikrobiyolojik analizi, Adnan Ünlütürk, Fulya Turantaş, 2002 |
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| 23 | Assesment |
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| TERM LEARNING ACTIVITIES | | NUMBER | WEIGHT | | |
|----------------------------|---|--------|--------|-----------------|------------------------|
| Activites | | | Number | Duration (hour) | Total Work Load (hour) |
| Theoretical | | | 14 | 1.00 | 14.00 |
| Home work-project | 0 | 0.00 | | | |
| Practicals/Labs | | | 14 | 2.00 | 28.00 |
| Self study and preperation | | | 7 | 2.00 | 14.00 |
| Total | 2 | 100.00 | | | |
| Homeworks | | | 0 | 0.00 | 0.00 |
| Projects | | | 0 | 0.00 | 0.00 |
| Projects Grade | | | 0 | 0.00 | 0.00 |
| Field Studies | | | 0 | 0.00 | 0.00 |
| Midterm exams | | | 1 | 14.00 | 14.00 |
| Total | | | 100.00 | | |
| Others | | | 0 | 0.00 | 0.00 |
| Final Exams | | | 1 | 20.00 | 20.00 |
| Total Work Load | | | | | 90.00 |
| Total work load/ 30 hr | | | | | 3.00 |
| ECTS Credit of the Course | | | | | 3.00 |

| 25 | CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS | | | | | | | | | | | | | | | |
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| | PQ1 | PQ2 | PQ3 | PQ4 | PQ5 | PQ6 | PQ7 | PQ8 | PQ9 | PQ10 | PQ11 | PQ12 | PQ13 | PQ14 | PQ15 | PQ16 |
| ÖK1 | 4 | 1 | 4 | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 3 | 1 | 0 | 0 | 0 | 0 |
| ÖK2 | 4 | 1 | 4 | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 3 | 1 | 0 | 0 | 0 | 0 |
| ÖK3 | 4 | 1 | 5 | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 3 | 1 | 0 | 0 | 0 | 0 |
| ÖK4 | 4 | 1 | 4 | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 3 | 1 | 0 | 0 | 0 | 0 |

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| ÖK5 | 4 | 1 | 4 | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 3 | 1 | 0 | 0 | 0 | 0 |
| ÖK6 | 4 | 1 | 4 | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 3 | 1 | 0 | 0 | 0 | 0 |
| ÖK7 | 4 | 1 | 5 | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 3 | 1 | 0 | 0 | 0 | 0 |
| ÖK8 | 4 | 1 | 5 | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 3 | 1 | 0 | 0 | 0 | 0 |
| LO: Learning Objectives PQ: Program Qualifications | | | | | | | | | | | | | | | | |
| Contribution Level: | 1 very low | | | 2 low | | | 3 Medium | | | 4 High | | | 5 Very High | | | |