



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

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|--|---|---|----------------------|---|---|----------------------------------|---|------------|---|
| Course Title | | Milk And Dairy Products Technology I | | | | | | | |
| Course Code | | KGT209 | | Course Level | | Short Cycle (Associate's Degree) | | | |
| ECTS Credit | 4 | Workload | 100 (<i>Hours</i>) | Theory | 2 | Practice | 1 | Laboratory | 0 |
| Objectives of the Course | | <p>The aim of the course is</p> <ul style="list-style-type: none">• to enable students to gain qualification about accepting the raw materials and auxiliary materials to plant in accordance with the Turkish Food Codex and Turkish Standards Institution(TSE) and controlling the pre-processes• to equip students with the knowledge and skills of controlling the production of drinking milk, dried milk products and cheese | | | | | | | |
| Course Content | | <ul style="list-style-type: none">• Characteristics of milk• Collection and reception of raw milk• Cleaning, deaeration and deodorization of milk• Separation, standardization and homogenization of milk• Pasteurized and sterilized drinking milk technology• Milk powder production• Whey processing• Production of different types of cheese production (white brined, kashar, whey, processed cheese) | | | | | | | |
| Work Placement | | N/A | | | | | | | |
| Planned Learning Activities and Teaching Methods | | | | Explanation (Presentation), Experiment, Demonstration | | | | | |
| Name of Lecturer(s) | | Prof. Dilek KESKİN | | | | | | | |

Assessment Methods and Criteria

| Method | Quantity | Percentage (%) |
|---------------------|----------|----------------|
| Midterm Examination | 1 | 40 |
| Final Examination | 1 | 70 |

Recommended or Required Reading

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| 1 | Atilla YETİŞMEYEN, Süt Teknolojisi, A.Ü. Ders Kitabı (1992). |
| 2 | Turan İNAL, Süt ve Süt Ürünleri Hijyen ve Teknolojisi İ.Ü. Ders kitabı (1990). |

| Week | Weekly Detailed Course Contents | |
|------|---------------------------------|--|
| 1 | Theoretical | Definition and composition of milk, factors affecting milk yield and composition |
| 2 | Theoretical | Collection and reception of raw milk, measurement of milk in the plant. |
| 3 | Theoretical | Cleaning, deaeration and deodorization of milk |
| 4 | Theoretical | Süt yağının ayrılması ve standardizasyonu |
| 5 | Theoretical | Homogenization of milk. Pasteurized drinking milk technology |
| 6 | Theoretical | Sterilized drinking milk technology |
| 7 | Theoretical | Storage of drinking milk |
| 8 | Intermediate Exam | Mid-term exam |
| 9 | Theoretical | Milk powder production |
| 10 | Theoretical | Whey processing. Storage of dried milk products |
| 11 | Practice | White brined cheese production |
| 12 | Practice | Kashar cheese production |
| 13 | Practice | Whey cheese production |
| 14 | Practice | Processed cheese production |
| 15 | Practice | An overview |
| 16 | Final Exam | Final Exam |

Workload Calculation

| Activity | Quantity | Preparation | Duration | Total Workload |
|--------------------|----------|-------------|----------|----------------|
| Lecture - Theory | 14 | 1 | 2 | 42 |
| Lecture - Practice | 10 | 1 | 1 | 20 |



| | | | | |
|---|----|---|---|-----|
| Assignment | 10 | 1 | 0 | 10 |
| Individual Work | 10 | 2 | 0 | 20 |
| Midterm Examination | 1 | 2 | 1 | 3 |
| Final Examination | 1 | 4 | 1 | 5 |
| Total Workload (Hours) | | | | 100 |
| [Total Workload (Hours) / 25*] = ECTS | | | | 4 |
| *25 hour workload is accepted as 1 ECTS | | | | |

Learning Outcomes

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|---|--|
| 1 | Understand the technological importance of milk composition, chemistry and microbiology |
| 2 | To gain basic knowledge about the production technologies of milk products |
| 3 | To learn the working principles of tools, equipments and systems used in milk technology |
| 4 | Understand the technological importance of milk composition |
| 5 | Understand the technological importance of microbiology |

Programme Outcomes (Food Technology)

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|----|--|
| 1 | To be able to remember technologies used in food sector |
| 2 | to be able to recognise food production condition and provide to food safety |
| 3 | to be able to comprehend basic processes in food production |
| 4 | to be able to apply hygien and sanitation rules in food facilities |
| 5 | to be able to remember basic chemistry, food chemistry and microbiology |
| 6 | to be able to write physical, chemical and nutritional properties of foods and to comment their effect on human health |
| 7 | to be able to memorise food quality control technics and to evaluate result of control according to food legislation |
| 8 | to be able to have knowledge of professional ethics and responsibility |
| 9 | to be able to work in team and individual |
| 10 | to be able to communicate orally and proficiency in writing |
| 11 | to be able to follow professional development that adopt of life-long learning |
| 12 | to be able to be a person who wanted for sector |

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 | 5 | 5 |
| P3 | 5 | 5 | 5 |
| P4 | 4 | 5 | 4 |
| P5 | 4 | 4 | 4 |
| P6 | 4 | 4 | 4 |
| P7 | 4 | 4 | 4 |
| P8 | 4 | 4 | 4 |
| P9 | 5 | 4 | 5 |
| P10 | 5 | 5 | 5 |
| P11 | 5 | 5 | 5 |
| P12 | 5 | 5 | 5 |

