



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Laboratory Technique in Dairy Industry							
Course Code		ST202		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	4	Workload	102 (<i>Hours</i>)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		The aim is to furnish the student with basic laboratory techniques, analysis methods, and general principles of laboratory methods. Students will practice to apply laboratory techniques on their own and will have learned how to apply various analysis techniques.							
Course Content		Safety rules while working in a laboratory • Recognizes used in laboratory instruments and supplies • Solutions, Molarity, Normality, ppm, % , problems • Sampling: How to get appropriate samples representing the population, • Basic chemical, physicals and instrumental analysis.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Karagözlü, C., Akbulut, N. 2008. Laboratuvar Tekniği. Ege Üniversitesi Basımevi, Bornova, İzmir.
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Week	Weekly Detailed Course Contents	
1	Practice	Appropriate sample preparation and weighing
2	Practice	Appropriate sample preparation and weighing
3	Practice	Physical analysis
4	Practice	Physical analysis
5	Practice	Physical analysis
6	Practice	Chemical analysis
7	Practice	Titration acidity and analysis
8	Intermediate Exam	Midterm exam
9	Practice	Solutions, concentration related problems (% and ppm)
10	Practice	Molarity and Normality
11	Practice	Solutions, concentration related problems
12	Practice	instrumental analysis
13	Practice	instrumental analysis
14	Practice	Accreditation and validation
15	Practice	Accreditation and validation
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Lecture - Practice	14	0	2	28
Individual Work	14	0	1	14
Midterm Examination	1	0	2	2
Final Examination	1	0	2	2
Total Workload (Hours)				102
[Total Workload (Hours) / 25*] = ECTS				4

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

1	1. Learning and application skills in laboratory techniques
2	2. Deneye hazırlık, deney yapımı ve sonuçların değerlendirilmesi konusunda deneyim ve bilgi sahibi olma
3	3. Understanding of chemical laboratory techniques.
4	4. Understanding of instrumental laboratory techniques
5	5. This course gives information of laboratory results reporting
6	6. This course gives information of accreditation and validation

Programme Outcomes (Dairy Technology)

1	Having sufficient infrastructure in basic sciences and engineering subjects and ability to use the theoretical and applied info instantly in this field.
2	Determining the modern techniques, tools and information technologies required for applications related with his field and ability to use them efficiently
3	Ability for planning, projecting, and designing, following up, analyzing and finding target-driven solutions related with his field
4	Ability to have professional ethic and awareness.
5	Ability to work, decide, express opinions orally and in written individually
6	Ability to participate team studies, taking responsibility, making leadership.
7	Ability to conceive Atatürk's principles and reforms, to communicate in Turkish and foreign language.
8	Ability to comprehend the necessity to learn for a life time, to monitor developments in science and technology and continuously renew himself.
9	Having sufficient level of information about production and quality control of milk and dairy products and also product development, increasing product quality and food security fields.
10	Ability to detect, define, solve problems related with his field and to select and apply suitable methods and modeling techniques for this purpose.
11	To be conscious about workplace applications, worker health, work security and environment subjects, to have knowledge about legal results of the engineering applications related with his subject.

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

	L1	L2	L3	L4	L5	L6
P3	4	4	4	4	4	4
P9	5	5	5	5	5	5

