WATER ANALYSES

1	Course Title:	WATER ANALYSES
2	Course Code:	GIDS233
3	Type of Course:	Optional
4	Level of Course:	Short Cycle
5	Year of Study:	2
6	Semester:	3
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:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Dr. Ögr. Üyesi NUR YÜKSEK
15	Course Lecturers:	Meslek Yüksek okulları yönetim kurullarının görevlendirdiği öğretim elemanları
16	Contact information of the Course Coordinator:	Öğr. Üyesi Dr. Nur YÜKSEK nuryuksek@uludag.edu.tr 0224 294 23 50
17	Website:	
18	Objective of the Course:	Theoritical issues related to the importance of water and application subjects related to water analysis.
19	Contribution of the Course to Professional Development:	To have the knowledge and skills to ensure the quality control of drinking and utility water in Foof Businesses acording to the Turkish Food Codex.
20	Learning Outcomes:	
	1	Being productive in area of technolgy and science , having a creative and wide angle point of view.
	2	Having skills and knowledge in order to be able to realise the water and water analysis in conformity with regulations, hygiene and sanitation standarts and Turkish Food Regulation.
	3	Having obtained the abilility of doing physical,chemical and microbiological analysisi of food and commenting their results.
	4	Having the skill of working efficiently in multidisiplinary teams.
	5	Having the ability and effort of doing Research and Development and produce authentic ideas in order to respond to the development and demands of Food Sector.
	6	Acquring skill and knowledge about how to produce economical, functıonal and competitive products.
	7	Having professıonal and social ethical rules.
	8	Having the ability of using the machiens necessary for quality control and food security in food laboratories.
	9	Being able to acqure skill for computer programming, record-ing and documentation.

	10	Having the conscience of lifelong learning necessity by following the developments in science and technology and havinbg the will of innovating oneself continuously.

21	Course Content:

Course Content:

Week	Theoretical	Practice
1	The İmportance of water	Laboratory intrance
2	Classification of surface and groundwater	search with EDTA in water.
3	Tasks of water hygiene	search with EDTA in water.
4	Causes of water pollution	Nitritating in water with Trommsdorf.
5	Biological ,mechanical and chemical factors.	Nitritating in water with Trommsdorf.
6	Alimentation waters and decision (surveys)	Nitratating in water with Brucin.
7	water analysisi in terms of hygiene. Phsical,chemical laboratory examinations.	Nitratating in water with Brucin.
8	Bacteriological water analysis	Search Amoniac with Nessler.
9	Evaluation of laboratory analysis results of water.	Search Amoniac with Nessler.
10	Cleaning the waters. Dısınfectıon of water by physical method. Dısınfectıon of water by chemical method.	Search for free chlorine in water.
11	Search for free chlorine in water.	Search for free chlorine in water.
12	Correction of some errors see in the waters.	Bacteriological examination in water

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical according to the Turkısh Food Codex.	14	1.00	14.00
Practicals/Labs	14	2.00	28.00
Self study and preperation	3	0.00	0.00
Homeworks	1	6.00	6.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	18.00	18.00
Others	0	0.00	0.00
Final Exams	1	24.00	24.00
Total Work Load			90.00
Total work load/ 30 hr			3.00
ECTS Credit of the Course			3.00

Materials

TSE,266, Ankara.

Yüksek, N. 2015. Laboratuvar Teknikeri II

Yüksek, N. 2015 Food Microbiology metincopyplus

Yüksek, N. 2017. Water Analysisi. metincopyplus, Çağaloğlu, İstanbul

TERM LEARNING ACTIVITIES	**NUMBE**	**WEIGHT**
Midterm Exam	1	35.00
Quiz	1	5.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	3	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		Measurement and evaluation is carried out according to the principle of Bursa Uludağ University Associate and Undergraduate Education Regulation.

24	ECTS / WORK LOAD TABLE

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	**PQ2**	**PQ3**	**PQ4**	**PQ5**	**PQ6**	**PQ7**	**PQ8**	**PQ9**	**PQ10**	**PQ11**	**PQ12**	**PQ13**	**PQ14**	**PQ15**	**PQ16**
ÖK1	5	5	5	4	4	4	4	5	4	3	3	4	3	0	0	0
ÖK2	5	5	5	4	4	3	3	5	4	3	3	4	3	0	0	0
ÖK3	5	5	5	4	4	3	3	5	4	3	3	4	3	0	0	0
ÖK4	5	5	5	4	4	3	3	5	4	3	3	4	3	0	0	0
ÖK5	5	5	5	4	4	3	3	4	5	3	3	4	3	0	0	0
ÖK6	5	5	5	4	4	3	3	4	5	3	3	4	3	0	0	0
ÖK7	5	5	5	4	4	3	3	4	5	3	3	4	3	0	0	0
ÖK8	5	5	5	4	4	3	3	4	5	3	3	4	3	0	0	0
ÖK9	5	5	5	4	4	3	3	4	5	3	3	4	3	0	0	0
ÖK10	5	5	5	5	4	5	4	5	4	3	3	4	3	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**