		CHEN						
1	Course Title:	CHEMIS	TRY II					
2	Course Code:	FEN111	8					
3	Type of Course:	Compuls	ory					
4	Level of Course:	First Cycle						
5	Year of Study:	1						
6	Semester:	2						
7	ECTS Credits Allocated:	4.00						
8	Theoretical (hour/week):	4.00						
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:	Doç. Dr. SEVGÜL ÇALIŞ						
15	Course Lecturers:							
16	Contact information of the Course Coordinator:	scalis@uludag.edu.tr 0-224-2942227						
17	Website:							
18	Objective of the Course:	To consolidate and improve the chemistry knowledge acquired by students, to compensate for their deficiencies and to show their applicability						
19	Contribution of the Course to Professional Development:	Comprehends the concepts related to the field and the relationships between concepts based on the competencies gained in secondary education. Discusses the methods related to the production of scientific knowledge. Uses advanced information sources related to the field. Conceptualizes the facts and events related to the field, examines them with scientific methods and techniques, interprets the data. Defines and analyzes problems related to the field, and develops solutions based on evidence and research. Evaluates the acquired knowledge and skills with a critical approach. It shows that the society and the world is sensitive to the events / developments and monitors these developments. Has sufficient awareness of environmental protection and accumational safety.						
20	Learning Outcomes:							
		1	Explain the basic concepts, laws and calculations related to chemical equilibrium.					
		2	Interprets the necessary laws and calculation methods related to thermodynamics.					
		3	Relates the concepts of acid and base and solubility balances.					
		4	Relates and formulates basic concepts, laws and principles related to chemical kinetics.					
		5	Offers solutions to thermochemistry and electrochemistry calculations.					
		6						
		7						
		8						

		9								
		10								
21	Course Content:									
		Co	urse Conte	nt:						
Week	Theoretical		Practice							
1	Solutions and their physical propertie (Solubility event and its types, solution types)	es on and its								
2	Concentration and concentration unit	ts.								
3	Chemical kinetics; reaction rates, firs second order reactions.	and								
4	Reaction mechanisms, factors affect reaction rate.	ing								
5	Chemical equilibrium, finding the equ constant.	uilibrium								
6	Le Chatelier principle, factors affectir balance	ng								
7	Acids and Bases, Ionization of water and pH, strong ac bases, weak acids and bases, salts.	ids and								
8	Strong acids and bases, weak acids bases, salts.	and								
9	Solubility and complex ion balances.									
10 Activit	Chemical thermodynamics: First Law es	<u>/ of</u>	Number		Duration (hour)	Total Work Load (hour)				
Th e2 re	Chemical equations, Collapse, comp	lexation,	14		4.00	56.00				
Practica	als/Labs		0		0.00	0.00				
Self stu	Bated/pareperpais	-, -, -, -, -, -, -, -, -, -, -, -, -, -	12		4.00	48.00				
Homew	vorks		0		0.00	0.00				
Project	necay rates, ission, rusion, application of isotopes	JITareas	0		0.00	0.00				
Field S	tudies		0		0.00	0.00				
Midtern	Textbooks, References and/or Other			к. п., п агw	6.00	ey Herring, F. 6.00				
Others			0		0.00	0.00				
FERME	ARNING ACTIVITIES	NUMBE	WÉIGHT		10.00	10.00				
Total W	/ork Load					120.00				
ivilotem Total w	ork load/ 30 hr	1	40.00			4.00				
ECTS (Home v	Credit of the Course work-project	10	0.00			4.00				
Final E	xam	1	60.00							
Total		2	100.00							
Contrib Succes	ution of Term (Year) Learning Activities Grade	es to	40.00							
Contrib	ution of Final Exam to Success Grade	e	60.00							
Total			100.00							
Measur Course	rement and Evaluation Techniques Us	sed in the	i ecnniques such as lecture, discussion, question-answer, case study, 3E are applied in the teaching of the course. Midterm and end-of-year exams that include multiple choice or open-ended questions are taken into account in the assessment and evaluation of the course.							

24 EC	TS / WORK LOAD TABLE															
25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16
ÖK1	5	1	1	5	5	1	1	1	5	5	1	1	1	1	1	1
ÖK2	5	1	1	5	5	1	1	1	5	5	1	1	1	1	1	1
ÖK3	5	1	1	5	5	1	1	1	5	5	1	1	1	1	1	1
ÖK4	5	1	1	5	5	1	1	1	5	5	1	1	1	1	1	1
ÖK5	5	1	1	5	5	1	1	1	5	5	1	1	1	1	1	1
LO: Learning Objectives PQ: Program Qualifications																
Contrib ution Level:	Contrib 1 very lov ution Level:		low		2 low		3 Medium			4 High			5 Very High			