CYCLIC VOLTAMMETRY										
1	Course Title:	CYCLIC	VOLTAMMETRY							
2	Course Code:	KIM5016	3							
3	Type of Course:	Optional								
4	Level of Course:	Second	Cycle							
5	Year of Study:	1								
6	Semester:	2								
7	ECTS Credits Allocated:	6.00								
8	Theoretical (hour/week):	3.00								
9	Practice (hour/week):	0.00								
10	Laboratory (hour/week):	0								
11	Prerequisites:	None								
12	Language:	Turkish								
13	Mode of Delivery:	Face to f	ace							
14	Course Coordinator:	Prof. Dr. MEHMET HALUK TÜRKDEMİR								
15	Course Lecturers:	Yok								
16	Contact information of the Course Coordinator:	Tlf: 2941741 e-mail: hturkdemir@uludag.edu.tr								
17	Website:									
18	Objective of the Course:	This course is planned for to learn of knowledge about cyclic voltammetry basic knowledge and electrochemical characterization of various substances, and especially planned for graduate students from outside of the Electrochemistry.								
19	Contribution of the Course to Professional Development:									
20	Learning Outcomes:									
		1	To have the basic cyclic voltammetry and knowledge and its intended use.							
		2	To know needed items of cyclic voltammetry and knowledge of experimental studies							
		3	He can made redox characterization.of new chemicals in aqueous or non-aqueous media							
		4								
		5								
		6								
		7								
		8								
		9								
		10								
21	Course Content:									
		Co	burse Content:							
Week	I heoretical		Practice							
1	Cyclic voltammetry definition and us basic information of potentiostat	age,								
2	components, the electrode-solution i double layer structure, junction poter	e nterface, ntial.								

5	selection, selection criteria, GCE and electrode	on and I Pt					
4	Mercury working electrodes, working area	surface					
5	Voltammetric reference electrode, typ characteristics	bes and					
6	Auxiliary electrode and the required properties, IR drop, IR Compensatior	า					
7	Supporting electrolyte, specifications removal,	, oxygen					
8	Establishment of potential screening programs, scanning speed, potential number of cycles	limits,					
9	Peak potential, peak current and measurements, Randles-Sevcik equa	ation					
10	General reminders, description of un concepts and Midterm	ifying					
11	Reversibility, semi-reversibility, irreve in cyclic voltammetry curves.	ersibility					
12	Electron transfer mechanisms, gradu electron transfer steps and be monito voltammograms	al bred on					
13	Examination of EC, CE, ECE and mechanisms, effects on voltammogra	ams.					
14	Cyclic voltammetry in an anhydrous						
Activit	tes			Number	Duration (hour) Total Work Load (hour)		
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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
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ÖK2	0	0	3	4	3	0	0	0	0	0	0	0	0	0	0	0
ÖK3	4	0	3	4	3	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib ution Level:	b 1 very low		2 low			3 Medium			4 High			5 Very High				