Course Syllabus

Code - Course Title	**KİM429 - Chemistry of Main Group Elements**
Course Type	VII. SEMESTER
Laboratory + Practice	2+0
ECTS	**3.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	DOÇ. DR. FİLİZ YILMAZ

Mode of Delivery	The mode of delivery of this course is Face to face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	There is no recommended optional programme component for this course.
Work Placement	Not Applicable

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		General infromation about main group elements and some commun properties	
Week - 2		Periodic Table:General trend in table (electronegativity, ionization energy, electron affinit, effective nuclear charge, atomic radius) and periodic anomalies	
Week - 3		Hydrogen: Physical and chemical properties, dihydrogen, hydride compouns, hydrogen bond	
Week - 4		Alkali metals (Li, Na, K, Rb, Cs, Fr): Physical and chemical properties and their compounds.	
Week - 5		Alkaline Earth Metals (Be, Mg, Ca, Sr, Ba, Ra): Physical and chemical properties and their compounds.	
Week - 6		Group IB Transition Elements (Cu, Ag, Au):Physical and chemical properties and their compounds.	
Week - 7		Group IIB Transition Elements (Zn, Cd, Hg): Physical and chemical properties and their compounds.	
Week - 8		Group IIIA Elements (B, Al, Ga, In, Tl): Physical and chemical properties and their compounds.	
Week - 9		Group IVA Elements (C, Si, Ge,Sn, Pb):Physical and chemical properties and their compounds.	
Week - 10		Group VA Elements (N, P, As, Sb, Bi): Physical and chemical properties and their compounds.	
Week - 11		Group VIA Elements (O, S, Se, Te, Po):Physical and chemical properties and their compounds.	
Week - 12		Group VIIA Elements (F, Cl, Br, I, At):Physical and chemical properties and their compounds.	
Week - 13		Noble Gas Chemistry	
Week - 14		The importance of Main Group Elements in biolojical activities	

Learning Outcomes

#	Learning Outcome
1	debate the atomic structure of main group elements
2	Will be evaluate the periodic properties of elements
3	estimate chemical properties of main group element compounds
4	estimate physical properties of main group element compounds
5	estimate chemical properties of main group element compounds
6	debate the chemical bonds of main group element compounds

Sustainable Development Goals

No content has been provided.

Course Theme

No content has been provided.

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	0	0	0
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0	0	0
Ödevler	0	0	0
Proje - Rapor - Sunum Hazırlama	0	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	0	0	0
Final Sınavı Hazırlığı (sınav süresi dahil)	0	0	0
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0	0	0
Staj Uygulaması	0	0	0
		Calculated ECTS	**0**

Assessment Method and Passing Requirements

No content has been provided.

Assessment Method and Passing Requirements	Quamtity	Percentage (%)
1.Midterm Exam	1	30
Final Exam	1	40
2.Midterm Exam	1	30
	Sum (%)	**100**