Course Syllabus

Code - Course Title	**KİM139 - General Chemistry**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**3.5**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	DOÇ. DR. BELGİN SEVER, DOÇ. DR. ASAF EVRİM EVREN

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		Matter and Energy, Basic Units, ISI Units	
Week - 2		Atoms, Molecules and Ions	
Week - 3		Periodic Table and Periodic Properties	
Week - 4		Chemical Calculations, Mole Concept	
Week - 5		Development of Atomic Theory and Laws, Electronic Structures of Atoms	
Week - 6		Development of Atomic Theory and Laws, Electronic Structures of Atoms	
Week - 7		Chemical Bonds	
Week - 8		Chemical Bonds	
Week - 9		Gases and Gas Laws	
Week - 10		Properties of Liquids and Solids	
Week - 11		Chemical Reactions	
Week - 12		Chemical Reactions	
Week - 13		Chemical Reactions	
Week - 14		Chemical Reactions	

Learning Outcomes

#	Learning Outcome
1	Will be able to explain the substance.
2	Explain the concept of energy.
3	Explain the states of matter.
4	Be able to distinguish unit systems.
5	Explain Atoms, Molecules and Ions.
6	Explain the Development of Atomic Theory and Laws.
7	Explain the electronic structure of atoms.
8	Explain the radii of atoms and ions.
9	Explain Ionization Energy.
10	Explain Electron Affinity.
11	Explain other periodic properties.
12	Explain Lewis Theory.
13	Explain Ionic Bonding.
14	Explain covalent bonding.
15	Explain bond energy.
16	Explain molecular geometries.
17	Explain Atomic Mass.
18	Explain the concept of mole and Avogadro's number.
19	Explain chemical reactions and equations.
20	Be able to determine chemical formulas.
21	Explain Gas Pressure.
22	Explain the Gas Laws.
23	Explain the Ideal Gas Equation.
24	Explain gas mixtures.
25	Explain the Kinetic Theory of Gases.
26	Explain the behavior of non-ideal gases.
27	Explain Intermolecular Forces.
28	Explain liquids.
29	Be able to explain solids.
30	Be able to make chemical reaction calculations.

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.