

DERS TANITIM ve UYGULAMA BİLGİLERİ

Dersin Adı	Kodu	Yarıyıl	T+U+L (saat/hafta)	Türü (Z / S)	Yerel Kredi	AKTS
Kimya I	CH 103	Bahar	03+00+02	Zorunlu	4	6
Akademik Birim:	Bioinformatics and Genetics					
Öğrenim Türü:	Örgün Eğitim					
Ön Koşullar	none					
Öğrenim Dili:	İngilizce					
Dersin Düzeyi:	Lisans					
Dersin Koordinatörü:	Ebru BİLGET GÜVEN					
Dersin Amacı:	<p>To teach the basic concepts of chemistry and understand direct chemical changes.</p> <p>To perceive a connection between an observation in the “real” macroscopic world and an imagined change in the microscopic world, the world of atoms, ions and molecules</p>					
Dersin İçeriği:	<p>Matter, its properties and units. Electrons and other discoveries. The nuclear atom. Bohr atom. Types of chemical compounds. Mole concept. Chemical reactions. Acids and bases. Thermochemistry. Atomic spectra. Introduction to periodic table and its usage. Quantum theory. Quantum numbers. Lewis theory and structures.</p>					
Dersin Öğrenme Çıktıları (ÖÇ):	<ul style="list-style-type: none">• 1- bu alanın çevirisi henüz girilmemiş.• 2- bu alanın çevirisi henüz girilmemiş.• 3- bu alanın çevirisi henüz girilmemiş.• 4- bu alanın çevirisi henüz girilmemiş.• 5- bu alanın çevirisi henüz girilmemiş.• 6- bu alanın çevirisi henüz girilmemiş.• 7- bu alanın çevirisi henüz girilmemiş.• 8- bu alanın çevirisi henüz girilmemiş.• 9- bu alanın çevirisi henüz girilmemiş.					
Dersin Öğrenme Yöntem ve Teknikleri	<p>PowerPoint presentations including important images and daily examples about the subject, which are also shared with the students through the BlackBoard platform. Explaining the concepts on the board highly using colors (students are allowed to take photos). Conversation with the students during the lecture. Watching mechanistic/explanatory videos during lectures and discussing with students. Suggesting videos to watch later.</p>					

HAFTALIK PROGRAM

Hafta	Konular	Ön Hazırlık	ÖÇ
1	Chapter 1: Introduction: Matter and Measurement	Theoretical explanations, problem solving	1
2	Chapter 2: Atoms, Molecules, and Ions	Theoretical explanations, problem solving	2
3	Chapter 3: Chemical Reactions and Reaction Stoichiometry	Quiz #1, Theoretical explanations, problem solving and lab applications	3
4	Chapter 3: Chemical Reactions and Reaction Stoichiometry	Theoretical explanations, problem solving and lab applications	3
5	Chapter 4: Reactions in Aqueous Solution	Theoretical explanations, problem solving and lab applications	4
6	Chapter 4: Reactions in Aqueous Solution	Midterm #1; Theoretical explanations, problem solving and lab applications	4
7	Chapter 5: Thermochemistry	Theoretical explanations, problem solving and lab applications	5

8	Chapter 5: Thermochemistry	Theoretical explanations, problem solving and lab applications	5
9	Chapter 6: Electronic Structure of Atoms	Theoretical explanations, problem solving and lab applications	6
10	Chapter 6: Electronic Structure of Atoms	Quiz #2, Theoretical explanations, problem solving and lab applications	6
11	Chapter 7: Periodic Properties of the Elements	Theoretical explanations, problem solving and lab applications	7
12	Chapter 8: Basic Concepts of Chemical Bonding	Midterm #2; Theoretical explanations, problem solving and lab applications	8
13	Chapter 8: Basic Concepts of Chemical Bonding	Theoretical explanations, problem solving	8
14	Chapter 9: Molecular Geometry and Bonding Theories	Quiz #3, Theoretical explanations, problem solving and lab applications	9

Kadir Has Üniversitesi'nde bir dönem 14 haftadır, 15. ve 16. hafta sınav haftalarıdır.

ZORUNLU ve ÖNERİLEN OKUMALAR

Chemistry, The Central Science. 13th Edition
 Authors: Theodore L. Brown, University of Illinois at Urbana-Champaign; H. Eugene LeMay, Jr., University of Nevada, Reno; Bruce E. Bursten, University of Tennessee, Knoxville; Catherine J. Murphy, University of Illinois at Urbana-Champaign; Patrick M. Woodward, The Ohio State University; Matthew W. Stoltzfus, The Ohio State University.
 ISBN-13: 978-0-321-91041-7

DİĞER KAYNAKLAR

Presentations (in CD)
 Chemistry lab book (by Sule Samık)

DEĞERLENDİRME SİSTEMİ

Yarıyıl İçi Çalışmaları	Sayı	Katkı Payı (%)
Katılım	14	-
Laboratuvar	8	15
Ara Sınavlar/Sözlü Sınavlar/Kısa Sınavlar	5	45
Final Sınavı	1	40
Total:	28	100

İŞ YÜKÜ HESAPLAMASI

Etkinlikler	Sayısı	Süresi (saat)	Toplam İş Yüğü (saat)
Ders Saati	14	3	42
Laboratuvar	8	4	32
Ara Sınavlar/Sözlü Sınavlar/Kısa Sınavlar	5	8	40
Final Sınavı	1	36	36
Toplam İş Yüğü (saat):			150

1 AKTS = 25 saatlik iş yüğü

PROGRAM YETERLİLİKLERİ (PY) ve ÖĞRENME ÇIKTILARI (ÖÇ) İLİŞKİSİ

#	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9
OC1	2								1
OC2	2								1
OC3	2								1
OC4	2								1
OC5	2								1
OC6	2								1
OC7	2								1
OC8	2								1
OC9	2								1

Katkı Düzeyi: 1 Düşük, 2 Orta, 3 Yüksek