Department of Chemistry

Course Information Sheet & Course Outline

2021-2022 Fall Semester

Course Code	Course Name			Credit		ECTS	
CHM101	GENERAL CHEMISTRY			4		5	

Pre-requisite: None

Language: English		Course Type: Compulsory		Year: 2021-2022		Semester: Fall	

Weekly Hours	Class Hours	Laboratory	Practicum	Learning Sessions			
				PS	C	R	T
	3	2	0	0	2	2	1

Course Lecturer/ Coordinator	Dr. Chidi Wilson NWEKWO/ Assist. Prof. Dr. Süleyman AŞIR	Office Hours: Mon-**11am**, Tue-**12pm** Thur-**12pm** Fri-**12pm**
	E-mail address	Chidiwilson.nwekwo@neu.edu.tr	Online Office Hour Link: Wed - **12pm to 1pm** https://meet.google.com/ssv-qnph-ezh

Learning Outcomes	After the completion of this course, the student will be able to ► Know and properly use the language of chemistry (nomenclature, terminology, and symbolic representations) ► Comprehend and be able to apply chemical facts, concepts, and models. ► Succeed in qualitative and quantitative problem solving skills. ► Think critically about the mutual impacts of science, society, natural resources, and the environment.
Course Description	This course is designed as a one-semester course for freshman engineering students.
Course Objectives	Students who successfully complete this course will be able to: **1.** Develop fundamental principles of theoretical and applied chemistry **2.** Develop scientific inquiry, complexity, critical thinking, mathematical and quantitative reasoning. **3.** Explain phenomena observed in the natural world. **4.** Develop basic laboratory skills.

Textbooks and/or References	1	Chemistry Principles and Reactions (7th edition, 2012) by William L. Masterton and Cecile N. Hurley, Brooks/Cole Cengage Learning (Lecture notes)
	2	CHM101 Lab Manual
	3	Cengage Learning Centre, UZEM System, and non-virtual alternative assessment tools

Course Content	Matter and measurement; atoms, molecules and ions; mass relations in chemistry, stoichiometry; gases; electronic structure and the periodic table; covalent bonding
Methods and Techniques Used in the Course	• The traditional (face-to-face) learning majorly and an interactive E-learning method • Using the MindTap package On the Cengage Learning platform

WEEKLY OUTLINE

Week	Date	Topic	Activities	Reference
1	20-24 Sep	**Introduction to the Course**		
2	27 Sep-1 Oct	Matter and Measurements	Face to face class	1,3
3	4-8 Oct	Matter and Measurements	Face to face class	1,3
4	11-15 Oct	Atoms, Molecules and Ions	Face to face class with Quiz 1	1,3
5	**18**-22 Oct	Atoms, Molecules and Ions	Face to face class	1,3
6	25-**29** Oct	Mass Relations in Chemistry; Stoichiometry	Face to face class with Quiz 2	1,2,3
7	1-5 Nov	Mass Relations in Chemistry; Stoichiometry	Face to face class	1,3
8	**8-13 Nov**	**Midterm Exam Week**		
9	**15**-19 Nov	Gases	Face to face class with Quiz 3	1,2,3
10	22-26 Nov	Gases	Face to face class	1,3
11	29Nov-3Dec	Electronic Structure and the Periodic Table	Face to face class with Quiz 4	1,3
12	6-10 Dec	Electronic Structure and the Periodic Table	Face to face class	1,2,3
13	13-17 Dec	Covalent Bonding	Face to face class with Quiz 5	1,3
14	20-24 Dec	Covalent Bonding	Face to face class	1,3
15	27-31 Dec	Revision Lecture	Face to face class with Quiz 6	1,3
16	**3-13 Dec**	**Final Exam Week**		

Attendance: Minimum 70 %

Assessment Breakdown		Type	%	Reference/ Source	Relevant Competencies
	1	Lab	10	2	
	2	6 Quizzes (Midterm)	40	3	
	3	Final	50	-	
	4				
	5				

Learning Program					
Educational Tool	**Amount**	**Student Work Load (Hours)**	**Educational Tool**	**Amount**	**Student Work Load(Hours)**
Course Duration	14	14*3=39			
Study Hours	14	14*3=39			
Lab	3	3*1=3			
Quizz(es)	6	6*2=12			
Preparation for quizz(es)	6	6*6=36			
Final exam	1	1*2=2			
Final exam (Study hours)	1	1*12=12			
			Total		143
		Recommended ECTS Credit (Total Hours / 30):		**143/30 = ~ 5**	