GENERAL CHEMISTRY

1	Course Title:	GENERAL CHEMISTRY
2	Course Code:	CEV1033
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	1
6	Semester:	1
7	ECTS Credits Allocated:	3.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	1.00
10	Laboratory (hour/week):	0
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Doç.Dr. ALİ KARA
15	Course Lecturers:	-
16	Contact information of the Course Coordinator:	olcaytopac@uludag.edu.tr 02242942109
17	Website:	
18	Objective of the Course:	To introduce students to the basic concepts of chemistry science and to provide a chemistry background for improving the understanding of subsequent professional courses.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	Have an understanding of importance and fundamentals of chemistry science.
	2	Have the ability of understanding and using chemical terms when identifying and solving professional problems.
	3	Become familiar with chemical compounds and know the formulation and naming rules.
	4	Have an adequate knowledge about chemical reactions and necessary conditions and be able to solve stoichiometric calculations.
	5	Have an understanding of solution types and solution concentrations and use them in related calculations.
	6	Have the theoretical background for chemical laboratory practices.
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21	Course Content:	

Course Content:

Week	Theoretical	Practice
1	Introduction to the course (objective, content, grading…) granular and porous structure of matter, mobility of particles	Sample problem solving

2	States of matter, matter and energy, changes of state	Sample problem solving
3	Classification of matter, pure matters, mixtures, physical and chemical alterations, elements and compounds, separation of the mixtures.	Sample problem solving
4	Structure of atom (atomic theory, the structure of atom, subatomic particles, atomic number, mass number, isotopes, electron configurations, periodic table)	Sample problem solving
5	Chemical bonds (bonding properties and lack of reactivity, covalent bonds, ionic bonds, polar covalent bonds)	Sample problem solving
6	Attraction forces between particles and holistic view of the matter(Atomic lattice, van der walls forces, metalic lattices, moleculer lattices, ionic lattices, geological structures, rocks and minerals)	Sample problem solving
7	Molecules, ions and chemical formulas (molecules, ions, molecular formula, rough formula, formulas of ionic compounds, naming of ionic-molecular compounds, naming of acids and bases)	Sample problem solving
8	Repeating courses and midterm exam	Repeating courses and midterm exam
9	Chemical reactions and calculations (calculation of molecular and formula weight, concept of mole, writing and equalization of chemical equations)	Sample problem solving
11	General properties of aqueous solutions, electrolyte and non-electrolyte solutions	Sample problem solving
13	Solution concentrations, solution equations	Sample problem solving
14	Gases (gaseous substances, gas pressure, gas laws, ideal gas equation, gas reactions	Sample problem solving
22	Textbooks and References and/or Other Materials:	-“General Chemistry- Basic Concepts”, Raymond Chang, Palme Inc., Ankara, 2000. -“Chemistry-Basic Concepts”, Namık K. Tunalı, Namık K. Aras, Başarı Inc., Ankara, 1987.
23	Assesment	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	14	1.00	14.00
Self study and preperation	14	1.50	21.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	10.00	10.00
Others	1	4.00	4.00
Final Exams	1	13.00	13.00
Total Work Load			90.00
Total work load / 30 h			3.00
ECTS Credit of the Course			3.00

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	30.00
Quiz	1	20.00
Home work-project	0	0.00
Final Exam	1	50.00
Total	3	100.00

Contribution of Term (Year) Learning Activities to Success Grade	50.00
Contribution of Final Exam to Success Grade	50.00
Total	100.00
Measurement and Evaluation Techniques Used in the Course	

24 ECTS / WORK LOAD TABLE

25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS

	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**