

Course Title	Code	Semester	T+A	Credit	ECTS
General Chemistry -II	0804225	1	3+0	3	3

Precondition Courses	
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Course Language	Türkçe
Course Type	Zorunlu
Course Coordinator	
Lecturer	Prof. Dr. Mustafa DEĞİRMENÇİ
Course Assistants	
Course Objectives	This course gives information about the basic concepts of general chemistry to the first year students of Biology department and tells them the importance of general chemistry in their daily life.
Learning Outcomes and Sub-skills of the Course	At the end of this course the student; <ol style="list-style-type: none"> 1. Understands the terms of speed and equilibrium in chemical reactions and learns how to apply them to chemical reactions. 2. Learns the concepts related to acid-base and solutions. 3. will be able to understand the differences between metal and nonmetals. 4. will learn the basic concepts of electrochemistry, organic chemistry, nucleus chemistry and biochemistry.
Course Contents	Chemical Kinetics and Chemical Equilibria, Acids and Bases, Ionic Equilibria I, pH, Indicators, Buffers, Ionic Equilibria II, Solubility Products and Acid-Base Titrations, Electrochemistry, General Properties of Metal and Nonmetals, Transition Elements, Complex Ions and Coordination Compounds, Nucleous Chemistry, Organic Chemistry, Biochemistry.

WEEKS	TOPICS
1	Chemical Kinetics and Chemical Equilibria
2	Kinetics and Chemical Equilibria
3	Acids and Bases, Ionic Equilibria I, pH, Indicators
4	Buffers, Ionic Equilibria II
5	Solubility Products and Acid-Base Titrations
6	Electrochemistry
7	Midterm Exam
8	General Properties of Metal and Nonmetals
9	Transition Elements
10	Complex Ions and Coordination Compounds
11	Nucleous Chemistry
12	Organic Chemistry
13	Organic Chemistry
14	Biochemistry

GENERAL COMPETENCES

Understanding the terms related to speed and equilibrium in chemical reactions and applying them to chemical reactions, Recognizing Acid-base and solutions, Learning differences between metal and nonmetals, Learning basic concepts about electrochemistry, organic chemistry, nucleus chemistry and biochemistry.

REFERENCES

- R. H. Petrucci ve W. S. Hardwood, "General Chemistry and Application"; Çeviri Editörü: T. Uyar, "Genel Kimya Prensipler ve Uygulamalar", Palme yayıncılık, Ankara 2003.
- E. Erdik, Y. Sarıkaya, "Temel Üniversite Kimyası", Gazi Kitabevi, Ankara 2004.
- P. Atkins, L. Jones; Çeviri Editörleri: E. Kılıç, F. Köseoğlu, H. Yılmaz, "Temel Kimya I" ve "Temel Kimya II", Bilim yayıncılık, Ankara 2004.
- N. K. Aras ve N. K. Tunalı, Kimya- Temel Kavramlar, 5. Baskı, Beta Basım A.Ş. İstanbul, 1999.

RATING SYSTEM

Midterm Exam: %40

Final Exam : %60

Makeup exam: