

School of pharmacy
Department Medicinal Chemistry

Course title: **General Chemistry**

Credit (Theory or Practical): **3-Credit lecture Course**

Prerequisite: -----

Course Lecturers: **Dr. Asadi**

Responsible Lecturer: **Dr. Asadi**

Student responsibilities:

- 1- Seminars and projects: **15% of Whole mark**
- 2- Mid Term: **35% of whole mark**
- 3- Comprehensive Written Examination: **50% of Whole mark**

Course Description:

Course objectives:

Chemistry deals with observable changes caused by unobservable atomic-scale events, which means a size gap of Chemistry contains the molecular nature of matter and change mindboggling proportions must be understood.

Student Learning Objectives:

The students visualize chemical events on the molecular scale.

The problem-solving approach encourages students to first plan a logical approach to a problem, and only then proceed to solve it mathematically. **Students are expected to:**

Understand the basic concepts of chemistry the mass laws and the mole concept to apply the amounts of substances involved in a reaction. Atomic properties, and the periodic trends and types of bonding derived from them, as molecular structure determining.

Course title: General Chemistry
Tuesday (۱۳-۱۵)

No.	Subject	Professor	Date
1	Keys to the study of chemistry, The components of Matter	Dr. Asadi	Sunday. 01 Oct. (9 Mehr)
2	Stoichiometry of formulas and Equations	Dr. Asadi	Sunday. 08 Oct. (16 Mehr)
3	Three major Classes of Chemical reactions (part1)	Dr. Asadi	Sunday. 15 Oct. (23 Mehr)
4	Gases and the kinetic-Molecular Theory (part 1, 2)	Dr. Asadi	Sunday. 22 Oct. (30 Mehr)
5	Thermochemistry: Energy flow and Chemical (part 1, 2)	Dr. Asadi	Sunday. 29 Oct. (7 Aban)
6	Electron Configuration and chemical periodicity	Dr. Asadi	Sunday. 5 Nov. (14 Aban)
7	Models of chemical Bonding	Dr. Asadi	Sunday. 12 Nov. (21 Aban)
8	Mid Term Exam	Dr. Asadi	Sunday. 19 Nov. (28 Aban)
9	The shapes of Molecules	Dr. Asadi	Sunday. 26 Nov. (5 Azar)
10	Theories of Covalent Bonding	Dr. Asadi	Sunday. 03 Dec. (12 Azar)
11	Intermolecular forces: liquids, solids, and phase changes	Dr. Asadi	Sunday. 10 Dec. (19 Azar)
12	The properties of Mixtures: Solutions and Colloids	Dr. Asadi	Sunday. 24 Dec. (3 Day)
13	Equilibrium: The Extent of Chemical reactions	Dr. Asadi	Sunday. 31 Dec. (10 Day)
14	Acid-Base equilibrium	Dr. Asadi	Sunday, 7 Jan. (17 Day)
15	Chapter 20: Thermodynamic	Dr. Asadi	Sunday. 14 Jan. (24 Day)

The contribution of the grade of the professors of the course

professor	Exercise	Mid Exam	Final Exam	Sum
Dr Asadi	3	7	10	20

References:

- **“Chemistry: the molecular nature of matter and change”** *Martin S. Silberberg, Patricia Amateis, Virginia Polytechnic. Seventh edition.*

Notes:

- All classes will be held in Besarati (Eastern 7) street, North Shahin Boulevard

The absence hours of a student should not exceed 4/17 in theoretical, 2/17 in practical and laboratorial. Otherwise, the score for that course or section will be considered as zero.

Note 1: allowed absences are accepted if students bring in documents for that and the related professor approves it. Acting against absences (either excused or not) will be the decision of the professor and agreement of the college.