

School of pharmacy

Department Medicinal Chemistry

Course title: General Chemistry

Credit (Practical): 1

Prerequisite: -

Course lecturers: Dr. Asadi

Responsible lecturer: Dr. Asadi

1- Practical Exam 30% of whole mark

2- Exercises: 25% of whole mark

3- Comprehensive Written Examination: 45% 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 mind-boggling 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 lab course (Saturday, 13-17)

| | Subject | Lecturer | Date |
|----|---|-----------|-----------------------------|
| 1 | Basic Laboratory Operations and safety (No bench work) | Dr. Asadi | Saturday. 1 Sep. (8 Mehr) |
| 2 | Preparation of solution and Dilution | Dr. Asadi | Saturday. 7 Oct. (15 Mehr) |
| 3 | Preparation of buffer solution | Dr. Asadi | Saturday. 14 Oct. (22 Mehr) |
| 4 | Measuring the density and viscosity of liquids | Dr. Asadi | Saturday. 21 Oct. (29 Mehr) |
| 5 | Qualitative Analysis of cation; Na+, K+, NH4+ | Dr. Asadi | Saturday. 28 Oct. (6 Aban) |
| 6 | Qualitative Analysis of cation; Mg2+, Ca2+, Cu2+ | Dr. Asadi | Saturday. 4 Nov. (13 Aban) |
| 7 | Qualitative Analysis of common Anions | Dr. Asadi | Saturday. 11 Nov. (20 Aban) |
| 8 | Preparation of H2O2 and study of its properties | Dr. Asadi | Saturday. 18 Nov. (27 Aban) |
| 9 | Factors Affecting Reaction Rates | Dr. Asadi | Saturday. 25 Nov. (4 Azar) |
| 10 | Preparation of a double salt and a complex and their comparison with each other | Dr. Asadi | Saturday. 2 Dec. (11 Azar) |
| 11 | Hardness of water | Dr. Asadi | Saturday. 9 Dec. (18 Azar) |
| 12 | Preparation of bleach and study of its properties | Dr. Asadi | Saturday. 23Dec. (25 Azar) |
| 13 | Molar solubility, common ion effect | Dr. Asadi | Saturday. 30 Dec. (2 Day) |
| 14 | Final Exam (Theory and Practical) | | Saturday. 6 Jan. (9 Day) |

The contribution of the grade of the professors of the course

| professors | Lab report | Practical final Exam | Theorical Final Exam | Sum |
|------------|------------|-------------------------|-------------------------|-----|
| Dr Asadi | 5 | 6 | 9 | 20 |