



Department of ...General ...science.....

College of ...Basic Education.....

University of ...Salahaddin.....

**Subject:Course Book of
Practical Inorganic Chemistry for Second Stage**

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Lecturer's name Gulkhater Hammad Sharif

Academic Year: 2022 - 2023

Course Book

1. Course name	Practical Inorganic Chemistry
2. Lecturer in charge	Gulkhater Hammad Sharif
3. Department/ College	General Science /Basic Education
4. Contact	e-mail: gulkhater.sharif@su.edu.krd Tel: 07504750226
5. Time (in hours) per week	12
6. Office hours	30
7. Course code	
8. Teacher's academic profile	<p>1985-1986 BSc in Chemistry 1991 published a research in Journal of the Iraqi chemical society ,subject of the research (The stability constants and thermodynamic functions of Palladium II (Pd II) complexes with Salicylic acid its derivatives 1986-2001 assistant chemist 2001 – 2004 MSc in Analytical Chemistry 2004 till now Lecturer in General Science Have been teaching these subjects:</p> <ul style="list-style-type: none"> • Analytical chemistry (theory lectures of second stage) • Analytical chemistry (practical of second stage) • Organic chemistry (theory lectures of third stage) • Industrial chemistry (theory lectures of third stage) • Scientific debate (theory lectures of first stage) • General Chemistry of first stage (Theory and Practical) • Had a training course about Methods of teaching , a course about PowerPoint , Excel , Microsoft word,Moodle ,Google Application.
9. Keywords	Inorganic chemistry, purification, preparation,.
10. Course overview:	<p>This course provides an introduction to the preparation of some inorganic compounds and procedures for separation of some ions . It will teach the students how to do :</p> <ol style="list-style-type: none"> 1- Separation of ions 2- Purification of crude table salt

11. Course objective:

The purpose of this course to :

- ❖ Learn the student to prepare some compounds
- ❖ Learn the student procedure of purification
- ❖ Learn the student to separate some ions

12. Student's obligation

- ❖ In each practical session a quiz will be done.
- ❖ Homework will be given to the students and bring it next session.
- ❖ The students should prepare a report after each practical session after doing any experiment.
- ❖ The students are not allowed to enter the laboratory without wearing the white coat.

13. Forms of teaching

The data show and whiteboard are used

14. Assessment scheme

Semester	Practical degree %	Theory		
		Seasonal Exam.	Quizzes	Dailey Activities
1 st semester	35			
2 nd semester	35			
Final Exam.				
Total 100%				

15. Student learning outcome:

- Through the practical sessions the students will learn the difference between tap water, mineral water and distilled water.
- Students will learn procedure for refining crude table salt
- Students learn information about Solubility

16. Course Reading List and References:

▪ Key references:

1. Basic inorganic chemistry, by F. Albert cotton
2. Inorganic chemistry by Catherine E. Housecroft
3. Coordination chemistry by Fred basolo
4. Scientific webs and journals

▪ Useful references:

17. The Topics:

Lecturer's name

18. Practical Topics (If there is any)

Lecturer's name:
Gulhater Hammad
Sharif
(3 hrs)

1-Course book

2-Refining Crude Table salt (NaCl)

3- Separation of ions

4-Determination of $K_2Cr_2O_7$ Solubility in
Water at Different Temperatures

5- Preparation of Copper (I) Chloride
(CuCl)

6-Preparation of Copper (I) Iodide(CuI)

7-Determination of Equivalent Weight of
Zinc(Zn)

8-Preparation of Chromium alum(Double salt) $\text{KCr}(\text{SO}_4)_2 \cdot 7\text{H}_2\text{O}$

9- Hardness of Water

10- Determination of Total Hardness of Water

11- Determination of Permanent Hardness of Water

19. Examinations:

20. Extra notes:

21. Peer review

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