

Course Description Form

University: Mosul College: Science

Department: Chemistry

1. Course Name: Practical Inorganic Chemistry/3 rd class/Course 1		
2. Course Code: SCCH24-F3011		
3. Semester / Year: 2024-2025		
4. Description Preparation Date: 8-10-2024		
5. Available Attendance Forms: practical experiences		
6. Number of Credit Hours (Total)(30) / Number of Units (Total)one units		
7. Course administrator's name (mention all, if more than one name)		
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8. Course Objectives

Course Objectives

iving a brief overview of complexes, how they are formed, and their types a rms, along with defining ligands, studying their types and forms, and studyi. isomerism and types of isom

9. Teaching and Learning Strategies

Strategy

Conducting
transitional and
hexa-dentate

laboratory experiments on geometric and bonding isomers and typ of complexes for non-transitional elements and comparing them w a study of complexes for di- and ligands.

10. Course Structure

Week	Ho urs	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
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First	2	Understanding methods preparing complexes transitional and non-transition elements and comparing them with study of isomers and their types.	Geometrical Isomerism(part1 f	) practical a theoretical	Daily preparatio daily, ora semester exam reports
Second	2		Geometrical Isomerism(part2)		
Third	2		Preparation of Cobalt (III) Complex with bidentate		
Fourth	2		ligand f Aluminium		
Fifth	2		complexes(part1 Aluminium complexes Estimation of the of oxalate Ion theoretically and practically by an analytical method - (part2)		
Sixth	2		Preparation of Cobalt (III) Complex with Hexadentate Ligand (EDTA)		

Seventh	2		Acetylaceton Complexes		
Eighth	2		Linkage Isomers		
Ninth	2		Review the course experiences and prepare and get ready for the final exam		

11. Course Evaluation

Daily preparation : 2%

Quiz : 5%

Monthly : 15%

Daily writing : 3%

Reports : 1 %5

End of semester exam :60%

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	. .	
Main references (sources)	Practical In Inorganic Chemistry Full-text July 2019/Coordination Chemistry Marei M El-Ajaily, Abdussalam Ali Maihub, T.H. Noor, Omar Al practical inorganic chemistry	
Recommended books and references (scientific journals, reports...)		
Electronic References, Websites	online learning (google meet, google classroom, youtube)	
Curriculum update rate	15%	

Name and Signature of Course administrator's head

Name and Signature of the department

Course Description Form

University: Mosul College: Science Department: Chemistry

1. Course Name: Practical Inorganic Chemistry/3rd class/ course2

2. Course Code: SCCH24-F3011

3. Semester / Year: 2024_2025

4. Description Preparation Date: 8-2-2024

5. Available Attendance Forms: practical experiences

6. Number of Credit Hours (Total)(18) / Number of Units (Total)one units

7. Course administrator's name (mention all, if more than one name)

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8. Course Objectives					
Course Objectives		□ Preparing tetragonal copper binary complexes and studying th			
		spectroscopic properties using a spectrophotometer, applying Berlamber law theoretically and practically. • Preparation of optical isomers. • Preparation of copper complex with hexadentate ligand and used PH mete • Preparing a hexagonal iron-nickel complex and measuring its spec properties using a spectrophotometer, applying Berlambert’s theoretically and practically.			
9. Teaching and Learning Strategies					
Strategy		Adding several practical knowledge to students about inorganic chemistry .			
10. Course Structure					
Week	Ho urs	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	2	Methods preparation complexes bigonal&hexago al and studing Isomerism (geometrical&li age)	preparation and spectral study o some copper(II)complexes (Part preparation and spectral study o some copper(II)complexes)part	Preparing tet coordinated a hexa-2coordinated complexes a optical isome using spectroscphot metric metho and benefiti from them future fields.	Daily preparation of daily, oral a semester exams a reports
Second	2				
Third	2		Optical Isomers(part1)		
Fourth	2		Optical Isomers(part2)		
Fifth	2		EDTA With copper complexes		
Sixth	2		preparation and spectral study o some Fe,Ni complexes (Part 1)		
Seveth	2		preparation and spectral study of some Fe,Ni		

Name and Signature of Course administrator's

Name and Signature of the department

Eighth			complexes(part2)		
Ninth	2		Xanthate complexes		
	2		Review of experiments and preparation for final exams		

11. Course Evaluation

Daily preparation : 2%

Quiz : 5%

Monthly : 15%

Daily writing : 3%

Reports : 1 5%

End of semester exam :60%

12. Learning and Teaching Resources

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Curriculum update rate	15%

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