



A- Basic Information			
1- Title and code:	Aliphatic Organic Chemistry (1) (211 Ch)		
2- Program(s) on which this course is	Special Chemistry B.Sc. Program		
given:			
3- Year/Level of program:	2022–2023 /Second level		
	. (undergraduate)		
4- Teaching hours	Lectures hrs. /week	2	
	Tutorial hrs. /week	0	
	Practical hrs. /week	3	
	Total hrs. /week	5	
4- Credit hours	Total credit hrs.	3	

5- Names of lecturers contributing to the delivery of the course:		
Prof.Dr. Wagdy El-dougdougUndergraduate		
Prof.Dr Ali Abdel Maaboud		
Course coordinator:		
Prof.Dr. Wagdy El-dougdoug		
Prof.Dr Ali Abdel Maaboud		
External evaluator: None		

No. of students attending the course:	No. 82	100 %
No. of students completing the course:	No. 82	100%
Results:		

	No.	%	Grading of successful studen		
Passed	78	95.1		No.	%
Failed	4	4.9	Excellent	19	23.2
			Very Good	25	30.5
			Good	27	32.9
			Pass	7	8.5





C-Professional Information

1 – Course teaching

Tonia	Lecture	Tutorial	Practical	% of
Торк	hours	hours	hours	total
1. Halogenic derivatives of hydrocarbons	2	0	3	17.4%
2. Alcohols	2	0	3	17.4%
3. Ethers	2	0	3	17.4%
4. Sulphur compounds of alcohols	2	0	3	17.4%
5. Sulphur compounds of ethers	2	0	3	17.4%
6. Aldehydes	2	0	3	17.4%
7. Mid-term exam	2	0	3	17.4%
8. Ketones	2	0	3	17.4%
9. Monocarboxylic acids	2	0	3	17.4%
10. Esters	2	0	3	17.4%
11. Amides	2	0	3	17.4%
12. Amines	2	0	3	17.4%
13. Anhydrides	2	0	3	17.4%
14. Revision	2	0	3	17.4%
Total hours	28	0	42	100%

Topics taught as a percentage of the content specified:

 $\sqrt{}$

70-90 %

. . . .

>90 %

<70%

Reasons in detail for not teaching any topic: None If any topics were taught which are not specified, give reasons in detail: None

Achieved program intended learning outcomes, ILO's:

Knowledge and Understanding	Intellectual skills	Practical and professional skills	General skills
a1 to a6	b1 to b4	c1	d1 to d2

2- Teaching and learning methods:

Lectures: Using information technology, Lecture, Presentations, Problem solving, Discussions, Seminars and Brain storming





Practical training/ laboratory: Carrying out some chemical experiments in chemistry department lab.

Seminar/Workshop:	Field work is still needed

Class activity:

Using computer and data show during discussion

None Case Study:

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: None

3- Student assessment:

Tools	To Measure	Time schedule	Grading
Semester Work	a1, a2, a4, b1, b2 and d1	Fifth week	3 %
Mid-Term Exam	a1, a2, a3, a5, b1, b2, d1, and d2	Seventh week	3 %
Oral exam	a1, a2, a3, a4, a5, a6, b1, b2, b3,	Fifteenth week	6 %
	and d2		
Practical exam	c1	Sixteenth week	40%
Written exam	a1, a2, a3, a4, a5, a6, b1, b2, b3.	Seventeenth week	48 %
	Total		100 %

Members of examination committee		
	Prof.Dr. Wagdy El-dougdoug	
Prof.Dr Ali Abdel Maaboud		
Role of external evaluator	None	

None

4- Facilities and teaching materials:

Totally adequate

Adequate to some extent: Microphones functionality should be checked before semester begins

Inadequate

List any inadequacies: None

5- Administrative constraints

List any difficulties encountered: None

- 6- Student evaluation of the course: None
- 7- Comments from external evaluator(s): None





8- Course enhancement: Progress on actions identified in the previous year's action plan:

Actions required	Person responsible	Progress of action
Development of student skills;	Head of the department	Activity of skills development,
participating of all students (in	and all course instructors	scientific parts supporting the basic
groups) in collecting (using		contents of the course, was
international websites) some		performed
scientific parts supporting the		
basic contents of the course.		
Also, all these activities will be		
evaluated by the instructor of		
the course.		

Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2022 – 2023

Actions required	Person responsible	Completion date
As a continuation in skills development, all students (in groups) will try to make a linkage between the basic theoretical contents of the course and the practical applications that can be used based on these theoretical aspects.	Head of the department and all course instructors	By the beginning of the second semester of the academic year 2022-2023

Course coordinator:

Prof.Dr. Wagdy El-dougdoug	
Prof.Dr Ali Abdel Maaboud	

Program coordinator:	Prof. Dr. Safinaz M. Reda
Head of the Department:	Prof. Dr. Wagdy El-Dougdoug
Date:	2022-2023





A- Basic Information		
1- Title and code:	Aliphatic Organic Chemistr	ry (2) (213 Ch)
2- Program(s) on which this course is	Special Chemistry B.Sc. P	rogram
given:		
3- Year/Level of program:	2022–2023 /Second level	
	. (undergraduate)	
4- Teaching hours	Lectures hrs. /week	2
	Tutorial hrs. /week	1
	Practical hrs. /week	0
	Total hrs. /week	3
4- Credit hours	Total credit hrs.	2

5- Names of lecturers contributing to the delivery of the course:		
Dr. Amaal Younis		
Dr. Enas Abdel Alim		
Course coordinator:		
Dr. Amaal Younis		
Dr. Enas Abdel Alim		
External evaluator: None		

No. of students attending the course:	No. 9	100 %
No. of students completing the course:	No. 7	77.8 %
Results:		

	No.	%	Grading of su	iccessful stud	lents:
Passed	4	44.4	C	No.	%
Failed	5	55.6	Good	1	11.1
			Pass	3	33.3





C- Professional Information

1 – Course teaching

Торіс	Lecture hours	Tutorial hours	Practical hours	% of total
1. Introduction	2	0	0	17.4%
2. Aliphatic cycloalkanes	2	0	0	17.4%
3. Dienophiles and their applications	2	0	0	17.4%
4. Unsaturated alcohols (synthesis and applications)	2	0	0	17.4%
5. Polyhydric alcohols (Di & Trihydric alcohols)	2	0	0	17.4%
6. Polyhydric alcohols in industrial field	2	0	0	17.4%
7. Mid-term exam	2	0	0	17.4%
8. Polycarboxylic acids	2	0	0	17.4%
9. Hydroxy acids	2	0	0	17.4%
10.Unsaturated organic acids	2	0	0	17.4%
11.Organic compounds with active methylene group	2	0	0	17.4%
12. Synthesis and of active methylene compounds	2	0	0	17.4%
13. Applications of naphthenes in industrial field	2	0	0	17.4%
14.Revision	2	0	0	17.4%
Total hours	28	0	0	100%

Topics taught as a percentage of the content specified:

<70%

>90 % 🕢 70-90 % 🗌

. . . .

Reasons in detail for not teaching any topic: None **If any topics were taught which are not specified, give reasons in detail:** None

Achieved program intended learning outcomes, ILO's:

Knowledge and Understanding	Intellectual skills	Practical and professional skills	General skills
a1 to a6	b1 to b4	c1 to C3	d1 to d2

2- Teaching and learning methods:

Lectures: Using information technology, Lecture, Presentations, Problem solving, Discussions, Seminars and Brain storming

Practical training/ laboratory: None





Seminar/Workshop: Field work is still needed

None

Class activity:

Field work is suil heeded

Using computer and data show during discussion

Case Study:

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and givereasons:None

3- Student assessment:

Tools	To Measure	Time schedule	Grading
Semester Work	a1, a2, a3, b2 and d1	Fifth week	5 %
Mid-Term Exam	a1, a2, a3, a5, a6, b2, b3, d1, and d2	Seventh week	5 %
Oral exam	a1, a2, a3, a4, a5, a6, b1, b2, b3,	fifteenth week	10 %
	d1and d2		
Written exam	a1, a2, a3, a4, a5, a6, b1, b2, b3.	sixteenth week	80 %
	Total		100 %

Members of examination committee		
	Dr. Amaal Younis	
Dr. Enas Abdel Alim		
Role of external evaluator	None	

4- Facilities and teaching materials:

Totally adequate

Adequate to some extent: Microphones functionality should be checked before semester begins

Inadequate

List any inadequacies: None

5- Administrative constraints

List any difficulties encountered: None

- 6- Student evaluation of the course: None
- 7- Comments from external evaluator(s):
 - None

8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required	Person responsible	Progress of action
Development of student skills;	Head of the department	Activity of skills development,
participating of all students (in	and all course instructors	scientific parts supporting the basic
groups) in collecting (using		contents of the course, was
international websites) some		performed
scientific parts supporting the		
basic contents of the course.		
Also, all these activities will be		
evaluated by the instructor of		
the course.		





Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2022 – 2023

Actions required	Person responsible	Completion date
As a continuation in skills development, all students (in groups) will try to make a linkage between the basic theoretical contents of the course and the practical applications that can be used based on these theoretical aspects.	Head of the department and all course instructors	By the beginning of the second semester of the academic year 2022-2023

Course coordinator:	
Dr. A	maal Younis
Dr. Enas Abdel Alim	
Program coordinator:	Prof. Dr. Safinaz M. Reda
Head of the Department:	Prof. Dr. Wagdy El-Dougdoug
Date:	2022-2023





A- Basic Information		
1- Title and code:	Petrochemical and petroleum additives (219	
	Ch)	
2- Program(s) on which this course is	Special Chemistry B.Sc. P	rogram
given:		
3- Year/Level of program:	2022–2023 /Second level.	
	(undergraduate)	
4- Teaching hours	Lectures hrs. /week	2
	Tutorial hrs. /week	0
	Practical hrs. /week 0	
	Total hrs. /week	2
4- Credit hours	Total credit hrs.	2

5- Names of lecturers contributing to the delivery of the course:	
Prof.Dr. Mohammed Hussien	
Dr. Amr Fteha	
Course coordinator:	
Prof.Dr. Mohammed Hussien	
Dr. Amr Fteha	
External evaluator: None	

External evaluator: None

No. of students attending the course:	No. 16	100 %
No. of students completing the course:	No. 15	93.8 %
Results:		

	No.	%	Grading of succ	essful stud	lents:
Passed	15	93.8		No.	%
Failed	1	6.2	Excellent	1	6.3
			Very Good	3	18.8
			Good	5	31.3
			Pass	6	37.5





C-Professional Information

1 – Course teaching

Торіс		Tutorial hours	Practical hours	% of total
1. Introduction to the principals of petroleum chemistry	2	0	0	17.4%
2. General uses of petroleum compounds in different fields	2	0	0	17.4%
3. Application of the petroleum products in rubbers, and fibers industries	2	0	0	17.4%
4. Application of the petroleum products in industrial detergents.	2	0	0	17.4%
5. Application of the petroleum products in Pesticides and other industries	2	0	0	17.4%
6. Short notes about petroleum additives and their properties.	2	0	0	17.4%
7. Mid-Term Exam.	2	0	0	17.4%
8. Preparation of Lubricating oils from of crude oils by refining and properties of Lub. Oils	2	0	0	17.4%
9. Lubricating oils additives	2	0	0	17.4%
10. Fuels additives	2	0	0	17.4%
11. What is the gasoline?	2	0	0	17.4%
12. General properties of gasoline additives	2	0	0	17.4%
13. General properties of fuel additives	2	0	0	17.4%
14. Revision	2	0	0	17.4%
Total hours	28	0	0	100%

Topics taught as a percentage of the content specified:

70-90 %

<70%

Reasons in detail for not teaching any topic: None

 \checkmark

If any topics were taught which are not specified, give reasons in detail: None Achieved program intended learning outcomes, ILO's:

Knowledge and Understanding	Intellectual skills	Practical and professional skills	General skills
a1 to a5	b1 to b3	c1 to C2	d1 to d4

2- Teaching and learning methods:

>90 %

Lectures: Using information technology, Lecture, Presentations, Problem solving, Discussions, Seminars and Brain storming

Practical training/ laboratory: Carrying out some chemical experiments in chemistry department lab.

Seminar/Workshop: Field work is still needed





Class activity:	
	Using computer and data show during discussion
Case Study:	None
Other assignment	nts/homework: weekly assignments
If teaching and	learning methods were used other than those specified, list and give
reasons:	None

3- Student assessment:

Tools	To Measure	Time schedule	Grading
Semester Work	a1, a2, a3, b2, d1 and d3	Fifth week	5 %
Mid-Term Exam	a1, a2, a3, a4, b2, d1, and d2	Seventh week	5 %
Oral exam	a1, a2, a3, a4, b1, b2, b3, c1, c2, and d4	fifteenth week	10 %
Written exam	a1, a2, a3, a4, a5,b1, b2, b3.	sixteenth week	80 %
Total			100 %

Members of examination committee:

Prof.Dr. Mohammed Hussien	
Dr. Amr Fteha	

Role of external evaluator

None

- 4- Facilities and teaching materials:
 - **Totally adequate**

Adequate to some extent: Microphones functionality should be checked before semester begins

- Inadequate
- List any inadequacies: None
- 5- Administrative constraints
 - List any difficulties encountered: None
- 6- Student evaluation of the course: None
- 7- Comments from external evaluator(s): None
- 8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required	Person responsible	Progress of action
Development of student skills;	Head of the department	Activity of skills development,
participating of all students (in	and all course instructors	scientific parts supporting the basic
groups) in collecting (using		contents of the course, was
international websites) some		performed
scientific parts supporting the		
basic contents of the course.		
Also, all these activities will be		
evaluated by the instructor of		
the course.		





Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2022 – 2023

Actions required	Person responsible	Completion date
As a continuation in skills development, all students (in groups) will try to make a linkage between the basic theoretical contents of the course and the practical applications that can be used based on these theoretical aspects.	Head of the department and all course instructors	By the beginning of the second semester of the academic year 2022-2023

Course coordinator:

Prof	Dr. Mohammed Hussien
Dr. Amr Fteha	
Program coordinator:	Prof. Dr. Safinaz M. Reda

Head of the Department: Date: Prof. Dr. Safinaz M. Reda Prof. Dr. Wagdy El-Dougdoug 2022-2023





A- Basic Information		
1- Title and code:	Chemical Thermodynamics (231 Ch)	
2- Program(s) on which this course is given:	Special Chemistry B.Sc. Program	
3- Year/Level of program:	2022-2023 Second level/. (undergraduate)	
4- Teaching hours	Lectures hrs. /week	2
	Tutorial hrs. /week 0	
	Practical hrs. /week 0	
	Total hrs. /week	2
4- Credit hours	Total credit hrs.	2

5- Names of lecturers contributing to the delivery of the course:

Course coordinator:

Dr. Asmaa AboEl-soud

Dr. Asmaa AboEl-soud

External evaluator: None

No. of students attending the course:	No. 82	100 %
No. of students completing the course:	No. 82	100 %
Results:		

No. %		Grading of succ	essful stud	lents:	
Passed	80	97.6		No.	%
Failed 2 2.4	Excellent	32	39.1		
			Very Good	29	35.3
			Good	13	15.9
			Pass	6	7.3





C-Professional Information

1 – Course teaching

Торіс	Lectur	Tutorial	Practic	% of
- F -	e hours	hours	al hours	total
1. Introduction to chemical thermodynamics concepts	2	0	0	17.4%
(System, Types of process, functions, equilibrium state).				
 Reversible and irreversible process, work and types of energies 	2	0	0	17.4%
3. Zero law and first law of thermodynamic(statements and mathematical expressions)	2	0	0	17.4%
4. Internal energy, enthalpy and heat capacity	2	0	0	17.4%
5. Applications of first law of thermodynamics and	2	0	0	17.4%
calculations of different thermodynamic functions				
6. Carnot cycle and the efficiency of heat engine	2	0	0	17.4%
7. Mid-Term Exam.	2	0	0	17.4%
8. Second law of thermodynamic (statements and mathematical expressions)	2	0	0	17.4%
9. Entropy concept, microstates and its calculations	2	0	0	17.4%
10. Free energies and the direction of physical and chemical reactions	2	0	0	17.4%
11. Chemical potential and thermodynamics of solutions	2	0	0	17.4%
12. Chemical equilibrium and equilibrium constant and its relation with the free energy and its dependence on pressure and temperature part (1).	2	0	0	17.4%
13. Chemical equilibrium and equilibrium constant and its relation with the free energy and its dependence on pressure and temperature part (2).	2	0	0	17.4%
14. Revision	2	2	0	17.4%
Total hours	28	0	0	100%

Topics taught as a percentage of the content specified: >90 % 70-90 %

 $\sqrt{}$

<70%

Reasons in detail for not teaching any topic: None If any topics were taught which are not specified, give reasons in detail: None Achieved program intended learning outcomes, ILO's:

Knowledge and Understanding	Intellectual skills	Practical and professional skills	General skills
a1 to a5	b1 to b4	c1 to C2	d1 to d4

2- Teaching and learning methods:

Lectures: Using information technology, Lecture, Presentations, Problem solving, Discussions, Seminars and Brain storming

Practical training/ laboratory: None

Seminar/Workshop: Field work is still needed

Class activity:

Using computer and data show during discussion





Case Study: None

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: None

3- Student assessment:

Tools	To Measure	Time schedule	Grading
Semester Work	a1, a2, a3, b2, and d1	Fifth week	5 %
Mid-Term Exam	a1, a2, a3, a4, b2, d1, and d2	Seventh week	5 %
Oral exam	a1, a2, a3, a4, b1, b2, b3.and d4	fifteenth week	10 %
Written exam	a1, a2, a3, a4, b1, b2, b3.	sixteenth week	80 %
	Total		100 %

Members of examination committee:

Dr. Asmaa AboEl-soud

Role of external evaluator

None

- 4- Facilities and teaching materials:
 - **Totally adequate**

Adequate to some extent: Microphones functionality should be checked before semester begins

Inadequate

List any inadequacies: None

5- Administrative constraints

List any difficulties encountered: None

- 6- Student evaluation of the course: None
- 7- Comments from external evaluator(s): None
- 8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required	Person responsible	Progress of action
Deficiency of computer and	Head of the department and all	The course note is updated and the
Programs. Limited days of field	course instructors	instructor helped in developing the practical
training due to shortage of funding		course experiments
from the university.		
Purchasing more specific references		
and tools.		

Action State whether or not completed and give reasons for any non-completion None





9- Action plan for academic year 2022 – 2023

Actions required	Person responsible	Completion date
Update Computer and design new program required to solve the problem under studies	Head of the department and all course instructors	By the beginning of the second semester of the academic year 2022-2023

Course coordinator:

Dr. Asmaa AboEl-soud

Program coordinator:	Prof. Dr. Safinaz M. Reda
Head of the Department:	Prof. Dr. Wagdy El-Dougdoug
Date:	2022-2023





A- Basic Information		
1- Title and code:	Water treatment Chemistry (240Ch)	
2- Program(s) on which this course is	Special Chemistry B.Sc. Program	
given:		
3- Year/Level of program:	2022–2023 / Second level	
	. (undergraduate)	
4- Teaching hours	Lectures hrs. /week 2	
	Tutorial hrs. /week 0	
	Practical hrs. /week 2	
	Total hrs. /week 4	
4- Credit hours	Total credit hrs.	3

5- Names of lecturers contributing to the delivery of the course:		
Prof.Dr.Alaa Amin		
Dr. Hesham El-Feky		
Course coordinator:		
Prof.Dr.Alaa Amin		
Dr. Hesham El-Feky		
External evaluator: None		

No. of students attending the course:	No. 10	100 %
No. of students completing the course:	No. 10	100 %
Results:		

No. %		%	Grading of successful students			
Passed	7	7 70		No.	%	
Failed	3	30	Very Good	2	20	
			Good	4	40	
			Pass	1	10	





C-Professional Information

1 – Course teaching

Торіс			Tutorial hours	Practical hours
1.	Introduction to photo organic chemistry.	2	0	2
2.	Reaction mechanism of photo organic compounds.	2	0	2
3.	Energy levels of molecules.	2	0	2
4.	Absorption and emission of light	2	0	2
5.	Principal reactions of photochemistry.	2	0	2
6. Photo chemistry of carbonyl compounds.		2	0	2
7. Mid-Term Exam.		2	0	2
8.	Photochemistry of alkenes part (1).	2	0	2
9.	Photochemistry of alkenes part (2).	2	0	2
10.	Photochemistry of enones part (1).	2	0	2
11.	Photochemistry of enones part (2).	2	0	2
12.	Photo chemistry of aromatic compounds.	2	0	2
13.	Introduction to identify isomers	2	0	2
14.	14. Stereochemistry of some organic compounds		0	2
Total hours 28 0				28

Topics taught as a <u>percentage of the content</u> specified:

>90 % √ 70-90 %

Reasons in detail for not teaching any topic: None

If any topics were taught which are not specified, give reasons in detail: None Achieved program intended learning outcomes, ILO's:

Knowledge and Understanding Intellectual skills		Practical and professional skills	General skills
a1 to a3	b1 to b3	c1 to C2	d1 to d3

2- Teaching and learning methods:

Lectures: Using information technology, Lecture, Presentations, Problem solving, Discussions, Seminars and Brain storming

 Using computer and data show during discussion

 Case Study:

<70%

. . . .

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: None





3- Student assessment:

Tools	To Measure	Time schedule	Grading
Semester Work a1, a2, a3, b1, d3, d1, and d2		Fifth week	3 %
Mid-Term Exam	a1, a2, a3 and b3	Seventh week	3 %
Oral exam	a1, a2, a3, b1, b2, b3 and c1	Thirteenth week	6 %
Practical exam	C1 and C2	Sixteenth week	40%
Written exam	a1, a2, a3, b1, b2, b3.	Fourteenth week	48 %
	Total		100 %
Aembers of examinat	tion committee		
	Prof.Dr.Alaa Amin	1	
	Dr. Hesham El-Fek	V	

Role of external evaluator

None

- 4- Facilities and teaching materials:
 - **Totally adequate**

Adequate to some extent: Microphones functionality should be checked before semester begins

- Inadequate
- List any inadequacies: None
- 5- Administrative constraints List any difficulties encountered: None
- 6- Student evaluation of the course: None
- 7- Comments from external evaluator(s):
 - None
- 8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required	Person responsible	Progress of action
Development of student skills;	Head of the department	Activity of skills development,
participating of all students (in	and all course instructors	scientific parts supporting the basic
groups) in collecting (using		contents of the course, was
international websites) some		performed
scientific parts supporting the		
basic contents of the course.		
Also, all these activities will be		
evaluated by the instructor of		
the course.		

Action State whether or not completed and give reasons for any non-completion None





9- Action plan for academic year 2022 – 2023

Actions required	Person responsible	Completion date
As a continuation in skills development, all students (in groups) will try to make a linkage between the basic theoretical contents of the course and the practical applications that can be used based on these theoretical aspects.	Head of the department and all course instructors	By the beginning of the second semester of the academic year 2022-2023

Course coordinator:

Prof.Dr.Alaa Amin
Dr. Hesham El-Feky

Program coordinator:	Prof. Dr. Safinaz M. Reda
Head of the Department:	Prof. Dr. Wagdy El-Dougdoug
Date:	2022-2023





A- Basic Information		
1- Title and code:	Chemistry of Small Industry	y 210 Ch)
2- Program(s) on which this course is	Special Chemistry B.Sc. P	rogram
given:		
3- Year/Level of program:	2022–2023 Second level.	
	(undergraduate)	
4- Teaching hours	Lectures hrs. /week	2
	Tutorial hrs. /week	0
	Practical hrs. /week	2
	Total hrs. /week	4
4- Credit hours	Total credit hrs.	3

5- Names of lecturers contribu	ting to the delivery of the course:
	Prof.Dr. Mohammed Arif
	Dr.Enas Abdel Alim
Course coordinator:	
	Prof.Dr. Mohammed Arif
	Dr.Enas Abdel Alim
External evaluator: None	

No. of students attending the course:	No. 231	100 %
No. of students completing the course:	No. 230	99.6 %
Results:		

	No.	% Grading of success			sful students:	
Passed	230	99.6		No.	%	
Failed	1	0.4	Excellent	161	70	
			Very Good	50	21.74	
			Good	15	6.52	
			Pass	4	1.74	





C-Professional Information

1 – Course teaching

Tonic	Lecture	Tutorial	Practical	% of
Topic	hours	hours	hours	total
1. Introduction	2	0	3	7.14%
2. Liquid detergents	2	0	3	7.14%
3. Hard soap	2	0	3	7.14%
4. Shampoo	2	0	3	7.14%
5. Dyes	2	0	3	7.14%
6. Creams	2	0	3	7.14%
7. Mid- Term Exam	2	0	3	7.14%
8. Perfume formulation	2	0	3	7.14%
9. Paper industry	2	0	3	7.14%
10. Paints	2	0	3	7.14%
11. Pigments	2	0	3	7.14%
12. Nylon 6,6	2	0	3	7.14%
13. Plastic industry	2	0	3	7.14%
14. Revision	2	0	3	7.14%
Total hours	28	0	42	100%

Topics taught as a percentage of the content specified: >90 %

 $\sqrt{}$

70-90 % <70%

Reasons in detail for not teaching any topic: None If any topics were taught which are not specified, give reasons in detail: None

Achieved program intended learning outcomes, ILO's:

Knowledge and Understanding	Intellectual skills	Practical and professional skills	General skills
a1 to a6	b1 to b4	c1 to C1	d1 to d2

2- Teaching and learning methods:





Lectures: Using information technology, Lecture, Presentations, Problem solving, Discussions, Seminars and Brain storming

Practical training/ laboratory: None

Seminar/Workshop: Field work is still needed Class activity:

Using computer and data show during discussion

Case Study: None

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: None

3- Student assessment:

Tools	To Measure	Time schedule	Grading
Semester Work	a1, a2, a4, b1, b2 and d1	Fifth week	3 %
Mid-Term Exam	a1, a2, a3, b1, and b2	Seventh week	3 %
Oral exam	a1, a2, a3, a4, a5, a6, b1, b2, b3, and d2	fifteenth week	6 %
Practical exam	C1	Sixteenth week	40%
Written exam	.a1, a2, a3, a4, a5, a6, b1, b2, b3	Seventeenth	48 %
		week	
Total			

Members of examination committee:

Prof.Dr. Mohammed Arif	
Dr.Enas Abdel Alim	

Role of external evaluator

None

- 4- Facilities and teaching materials:
 - **Totally adequate**

Adequate to some extent: Microphones functionality should be checked before semester begins

Inadequate

List any inadequacies: None

5- Administrative constraints

List any difficulties encountered: None

6- Student evaluation of the course: None

- 7- Comments from external evaluator(s): None
- 8- Course enhancement:

Progress on actions identified in the previous year's action plan:





Actions required	Person responsible	Progress of action
Development of student skills;	Head of the department	Activity of skills development,
participating of all students (in	and all course instructors	scientific parts supporting the basic
groups) in collecting (using		contents of the course, was
international websites) some		performed
scientific parts supporting the		
basic contents of the course.		
Also, all these activities will be		
evaluated by the instructor of		
the course.		

Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2022 – 2023

Actions required	Person responsible	Completion date
As a continuation in skills development, all students (in groups) will try to make a linkage between the basic theoretical contents of the course and the practical applications that can be used based on these theoretical aspects.	Head of the department and all course instructors	By the beginning of the second semester of the academic year 2022-2023

Course coordinator:

Pr	of.Dr. Mohammed Arif	
Dr.Enas Abdel Alim		
Program coordinator:	Prof. Dr. Safinaz M. Reda	

Head of the Department:	Prof. Dr. Wagdy El-Dougdoug
Date:	2022-2023





A-Basic Information		
1- Title and code:	Aromatic Organic Chemistr	ry (1) (212 Ch)
2- Program(s) on which this course is	Special Chemistry B.Sc. Program	
given:		
3- Year/Level of program:	2022-2023 Second level/(undergraduate)	
4- Teaching hours	Lectures hrs. /week	2
	Tutorial hrs. /week	1
	Practical hrs. /week	0
	Total hrs. /week	3
4- Credit hours	Total credit hrs.	2

5- Names of lecturers contributing to the delivery of the course:			
Prof.Dr. Mohammed Arif			
Prof.Dr. Amal Ahmed			
Course coordinator:			
Prof.Dr. Mohammed Arif			
Prof.Dr. Amal Ahmed			

External evaluator: None

No. of students attending the course:	No. 76	100 %
No. of students completing the course:	No. 76	100%
Results:		

No. %			Grading of successful students:		
Passed	60	78.9		No.	%
Failed	16	21.1	Excellent	14	18.42
			Very Good	18	23.68
			Good	21	27.63
			Pass	7	9.21





C- Professional Information

1 – Course teaching

Торіс	Lecture hours	Tutorial hours	Practical hours	% of total
1. Introduction	2	1	0	7.14%
2. Aromaticity	2	1	0	7.14%
3. Structure of Benzene	2	1	0	7.14%
4. Nomenclature of Benzene Derivatives	2	1	0	7.14%
5. Reactions of benzene	2	1	0	7.14%
6. Aromatic halogenated derivatives	2	1	0	7.14%
7. Mid-term	2	1	0	7.14%
8. Nitro compounds	2	1	0	7.14%
9. Aromatic carboxylic acids	2	1	0	7.14%
10. Aldehydes	2	1	0	7.14%
11. Ketones	2	1	0	7.14%
12. Aromatic amines	2	1	0	7.14%
13. Diazonium salts	2	1	0	7.14%
14. Revision	2	1	0	7.14%
Total hours	28	14	0	100%

Topics taught as a percentage of the content specified:

 \checkmark

70-90 %

....

<70%

Reasons in detail for not teaching any topic: None

If any topics were taught which are not specified, give reasons in detail: None Achieved program intended learning outcomes, ILO's:

Knowledge and Understanding	Intellectual skills	Practical and professional skills	General skills
a1 to a6	b1 to b4	c1 to C4	d1 to d2

2- Teaching and learning methods:

>90 %

Lectures: Using information technology, Lecture, Presentations, Problem solving, Discussions, Seminars and Brain storming

Practical training/ laboratory: Carrying out some chemical experiments in chemistry department lab.

Seminar/Workshop: Field work is still needed

Class activity:

Using computer and data show during discussion

Case Study:

Other assignments/homework: weekly assignments

None





If teaching and learning methods were used other than those specified, list and give reasons: None

3- Student assessment:

Tools	To Measure	Time schedule	Grading
Semester Work	a1, a2, a3, b2 and d1	Fifth week	5 %
Mid-Term Exam	a1, a2, a3, a5, a6, b2, b3, d1,	Seventh week	5 %
	and d2		
Oral exam	a1, a2, a3, a4, a5, a6, b1, b2,	fifteenth week	10 %
	b3, c4 d1and d2		
Written exam	a1, a2, a3, a4, a5, a6, b1, b2,	sixteenth week	80 %
	b3.		
	Total		100 %

Members of examination committee:

Prof.Dr. Mohammed Arif	
Prof.Dr. Amal Ahmed	

Role of external evaluator

None

- 4- Facilities and teaching materials:
 - Totally adequate

Adequate to some extent: Microphones functionality should be checked before semester begins

Inadequate

List any inadequacies: None

5- Administrative constraints

List any difficulties encountered: None

- 6- Student evaluation of the course: None
- 7- Comments from external evaluator(s): None
- 8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required	Person responsible	Progress of action
Development of student skills;	Head of the department	Activity of skills development,
participating of all students (in	and all course instructors	scientific parts supporting the basic
groups) in collecting (using		contents of the course, was
international websites) some		performed
scientific parts supporting the		
basic contents of the course.		
Also, all these activities will be		
evaluated by the instructor of		
the course.		

Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2022 – 2023





Actions required	Person responsible	Completion date
As a continuation in skills development, all students (in groups) will try to make a linkage between the basic theoretical contents of the course and the practical applications that can be used based on these theoretical aspects.	Head of the department and all course instructors	By the beginning of the second semester of the academic year 2022-2023

Course coordinator:	Course	coordinator:
---------------------	--------	--------------

Prof.Dr. Mohammed Arif
Prof.Dr. Amal Ahmed

Program coordinator:	Prof. Dr. Safinaz M. Reda
Head of the Department:	Prof. Dr. Wagdy El-Dougdoug
Date:	2022-2023





A- Basic Information		
1- Title and code:	Aromatic Organic Chemistry (2) (214 Ch)	
2- Program(s) on which this course is	Special Chemistry B.Sc. Program	
given:		
3- Year/Level of program:	2022–2023 /Second level	
	. (undergraduate)	
4- Teaching hours	Lectures hrs. /week	2
	Tutorial hrs. /week	1
	Practical hrs. /week	0
	Total hrs. /week 3	
4- Credit hours	Total credit hrs.	2

5- Names of lecturers contributing to the delivery of the course:
Prof.Dr. Mohammed Arif
Prof.Dr. Amal Ahmed
Course coordinator:
Prof.Dr. Mohammed Arif
Prof.Dr. Amal Ahmed
External evaluator: None

No. of students attending the course:	No. 4	100 %
No. of students completing the course:	No. 4	100 %
Results:	_	

No. %			Grading of successful students:		
Passed	2	50	_	No.	%
Failed	2	50	Excellent	0	0
			Very Good	0	0
			Good	1	25
			Pass	1	25





C-Professional Information

1 – Course teaching

Tania	Lecture	Tutoria	Practical	% of
Торіс	hours	l hours	hours	total
1. Introduction to carboxylic acids and	2	1	0	7.14%
derivatives.				
2. Aromatic acids and their acidic properties	2	1	0	7.14%
3. Aromatic acid derivatives	2	1	0	7.14%
4. Aromatic acid derivatives	2	1	0	7.14%
5. Introduction to polynuclear aromatic	2	1	0	7.14%
compounds				
6. Isolated polynuclear aromatic	2	1	0	7.14%
7. Mid-term exam.	2	1	0	7.14%
8. Stereo chemistry of isolated polynuclear	2	1	0	7.14%
aromatic.				
9. Fused (Naphthalene, Anthrathene,	2	1	0	7.14%
Phenanthrenes).				
10. Reactions of fused polynuclear aromatic	2	1	0	7 1/1%
compounds	2	1	0	/.14/0
11. Nonbenzinoid aromatic compounds	2	1	0	7.14%
12. Applications of aromatic acids and their	2	1	0	7 1/1%
derivatives	2	1	0	/.14/0
13. Industrial applications of polynuclear	2	1	0	7.14%
aromatics				
14. Revision	2	1	0	7.14%
Total hours	28	14	0	100%

Topics taught as a percentage of the content specified:

>90 % 70-90 % $\sqrt{}$

<70% **Reasons in detail for not teaching any topic:** None

If any topics were taught which are not specified, give reasons in detail: None Achieved program intended learning outcomes, ILO's:

Knowledge and Understanding	Intellectual skills	Practical and professional skills	General skills
a1 to a5	b1 to b4	c1 to C4	d1 to d2

2- Teaching and learning methods:

Lectures: Using information technology, Lecture, Presentations, Problem solving, Discussions, Seminars and Brain storming

Practical training/ laboratory: None

Seminar/Workshop: Field work is still needed

Class activity:

Using computer and data show during discussion





Case Study: None

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: None

3- Student assessment:

Tools	To Measure	Time schedule	Grading
Semester Work	a1, a2, b2 and d1	Fifth week	5 %
Mid-Term Exam	a1, a2, a3,a4, b2, b3, d1, and d2	Seventh week	5 %
Oral exam	a1, a2, a3, a4, a5, b1, b2, b3, c4 d1and d2	fifteenth week	10 %
Written exam	a1, a2, a3, a4, a5, b1, b2, and b3	sixteenth week	80 %
Total			

Members of examination committee

Prof.Dr. Mohammed Arif Prof.Dr. Amal Ahmed

Role of external evaluator

None

- 4- Facilities and teaching materials:
 - **Totally adequate**

Adequate to some extent: Microphones functionality should be checked before semester begins

Inadequate

List any inadequacies: None

5- Administrative constraints

List any difficulties encountered: None

- 6- Student evaluation of the course: None
- 7- Comments from external evaluator(s): None
- 8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required	Person responsible	Progress of action
Development of student skills;	Head of the department	Activity of skills development,
participating of all students (in	and all course instructors	scientific parts supporting the basic
groups) in collecting (using		contents of the course, was
international websites) some		performed
scientific parts supporting the		
basic contents of the course.		
Also, all these activities will be		
evaluated by the instructor of		
the course.		

Action State whether or not completed and give reasons for any non-completion None





9- Action plan for academic year 2022 – 2023

Actions required	Person responsible	Completion date
As a continuation in skills development, all students (in groups) will try to make a linkage between the basic theoretical contents of the course and the practical applications that can be used based on these theoretical aspects.	Head of the department and all course instructors	By the beginning of the second semester of the academic year 2022-2023

Course coordinator:

Þ	rof Dr. Mohammed Arif	
FIOLDI. Moliannied Ani		
Prof.Dr. Amal Ahmed		
Program coordinator:	Prof. Dr. Safinaz M. Reda	

i logram coordinator.	FIOL DL. Salliaz WI. Reda
Head of the Department:	Prof. Dr. Wagdy El-Dougdoug
Date:	2022-2023





A-Basic Information		
1- Title and code:	Inorganic Chemistry (2220	Ch)
2- Program(s) on which this course is given: Special Chemistry B.Sc. Program		ogram
3- Year/Level of program:	2022–2023 /Second level.	(undergraduate)
4- Teaching hours	Lectures hrs. /week	2
	Tutorial hrs. /week	1
	Practical hrs. /week	0
	Total hrs. /week	3
4- Credit hours	Total credit hrs.	2

5- Names of lecturers contributing to the delivery of the course:			
Prof.Dr.Mohammed Heikal			
Prof.Dr.Ebrahim El-Sayed			
Prof.Dr.El-Sayed El-badwy			
Prof.Dr.Moustafa Shahin			
Course coordinator:			
Prof.Dr.Mohammed Heikal			
Prof.Dr.Ebrahim El-Sayed			
Prof.Dr.El-Sayed El-badwy			
Prof.Dr.Moustafa Shahin			
External evaluator: None			

B- Statistical Information

No. of students attending the course: No. of students completing the course: Results:

No. 75	100 %
No. 75	100%

No. %			Grading of successful students		
Passed	74	98.7	_	No.	%
Failed	1	1.3	Excellent	43	57.3
			Very Good	16	21.3
			Good	9	12
			Pass	6	8





C-Professional Information

1 – Course teaching

Торіс	Lecture	Tutorial	Practical	% of
1 Daria dia tabla		nours	nours	10181
	2	1	0	7.14%
2. Valence bond theory and its applications	2	1	0	7.14%
3. Molecular orbital theory and its applications	2	1	0	7.14%
4. General properties and chemistry of group I _A / 1 elements	2	1	0	7.14%
5. General properties and chemistry of group II _A / 2 elements	2	1	0	7.14%
6. General properties and chemistry of group III _A /13 elements	2	1	0	7.14%
7. Mid-term exam	2	1	0	7.14%
8. General properties and chemistry of group V _A /15 elements	2	1	0	7.14%
 General properties and chemistry of group VIA / 16 elements 	2	1	0	7.14%
10.General properties and chemistry of group VII _A / 17 elements	2	1	0	7.14%
11.General properties and chemistry of group VIIIA /18 elements	2	1	0	7.14%
12. Applications of main group elements part1	2	1	0	7.14%
13.Applications of main group elements part2	2	1	0	7.14%
14.Revision	2	1	0	7.14%
Total hours	28	14	0	100%

Topics taught as a percentage of the content specified:

70-90 %

. . . .

<70%

>90 % $\sqrt{}$ **Reasons in detail for not teaching any topic:** None

If any topics were taught which are not specified, give reasons in detail: None Achieved program intended learning outcomes, ILO's:

Knowledge and Understanding	Intellectual skills	Practical and professional skills	General skills
a1 to a5	b1 to b3	c1 to C3	d1 to d4

2- Teaching and learning methods:

Lectures: Using information technology, Lecture, Presentations, Problem solving, Discussions, Seminars and Brain storming

Practical training/ laboratory: Carrying out some chemical experiments in chemistry department lab.





Seminar/Workshon:	Field work is still needed
ounnar/ wonshop.	I ICIG WOIK IS SUIT IICCGCG

None

Cloce	octivity	
Class	activity.	

Using computer and data show during discussion

Case Study:

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: None

3- Student assessment:

Tools	To Measure	Time schedule	Grading
Semester Work	a1, a2, a3, b2, d1, d1 and d2	Fifth week	5 %
Mid-Term Exam	a1, a2, a3, a4, b1, and b2	Seventh week	5 %
Oral exam	a1, a2, a3, a4, b1, b2, b3,c2, d4	fivteenth week	10 %
Written exam	a1, a2, a3, a4, b1, b2, b3.	sixteenth week	80 %
	Total		100 %

Members of examination committee:

Prof.Dr.Mohammed Heikal	
Prof.Dr.Ebrahim El-Sayed	
Prof.Dr.El-Sayed El-badwy	
Prof.Dr.Moustafa Shahin	

Role of external evaluator

None

4- Facilities and teaching materials:

Totally adequate

Adequate to some extent: Microphones functionality should be checked before semester begins

Inadequate

List any inadequacies: None

- **5-** Administrative constraints
 - List any difficulties encountered: None
- 6- Student evaluation of the course: None
- 7- Comments from external evaluator(s):

None

8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required	Person responsible	Progress of action
Development of student skills;	Head of the department	Activity of skills development,
participating of all students (in	and all course instructors	scientific parts supporting the basic
groups) in collecting (using		contents of the course, was
international websites) some		performed
scientific parts supporting the		
basic contents of the course.		
Also, all these activities will be		
evaluated by the instructor of		
the course.		





Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2022 – 2023

Actions required	Person responsible	Completion date
As a continuation in skills development, all students (in groups) will try to make a linkage between the basic theoretical contents of the course and the practical applications that can be used based on these theoretical aspects.	Head of the department and all course instructors	By the beginning of the second semester of the academic year 2022-2023

Course coordinator:

Prof.Dr.Mohammed Heikal
Prof.Dr.Ebrahim El-Sayed
Prof.Dr.El-Sayed El-badwy
Prof.Dr.Moustafa Shahin

Program coordinator:	Prof. Dr. Safinaz M. Reda
Head of the Department:	Prof. Dr. Wagdy El-Dougdoug
Date:	2022-2023





A-Basic Information		
1- Title and code:	Electrochemistry (234 Ch))
2- Program(s) on which this course is	Special Chemistry B.Sc. P	rogram
given:		
3- Year/Level of program:	2022-2023/Second level (u	ndergraduate)
4- Teaching hours	Lectures hrs. /week 2	
	Tutorial hrs. /week	1
	Practical hrs. /week	0
	Total hrs. /week	3
4- Credit hours	Total credit hrs.	2

5- Names of lecturers contributing to the delivery of the course:	
Prof.Dr.Nahed Fouad	
Prof.Dr.Asmaa Aboelsaoud	
Course coordinator:	
Prof.Dr.Nahed Fouad	
Prof.Dr.Asmaa Aboelsaoud	
External evaluator: None	

No. of students attending the course:	No. 228	100 %
No. of students completing the course:	No. 228	100 %
Results:		

No. %			Grading of suce	essful stuc	lents:
Passed	195	85.5		No.	%
Failed 33	33	14.5	Excellent	46	20.18
			Very Good	65	28.51
			Good	61	26.75
			Pass	23	10.09





C- Professional Information

1 – Course teaching

Tonic	Lecture	Tutorial	Practical	% of
торк	hours	hours	hours	total
1. Introduction to electrochemistry.	2	1	0	7.14
2. Galvanic cell	2	1	0	7.14
3. E. M.F series	2	1	0	7.14
4. Types of electrode	2	1	0	7.14
5. Types of cell (part 1).	2	1	0	7.14
6. Types of cell (part 2).	2	1	0	7.14
7. Mid-Term Exam.	2	1	0	7.14
8. Fuel cell	2	1	0	7.14
9. Types of fuel cells	2	1	0	7.14
10. Potentiometry	2	1	0	7.14
11. Corrosion	2	1	0	7.14
12. Inhibition of corrosion	2	1	0	7.14
13. Prevention corrosion	2	1	0	7.14
14. Revision	2	1	0	7.14
Total hours	28	14	0	100

Topics taught as a <u>percentage</u> of the content specified:

 $\sqrt{}$

<70%

Reasons in detail for not teaching any topic: None **If any topics were taught which are not specified, give reasons in detail:** None **Achieved program intended learning outcomes, ILO's:**

70-90 %

Knowledge and Understanding	Intellectual skills	Practical and professional skills	General skills
a1 to a5	b1 to b4	c1 to C2	d1 to d4

2- Teaching and learning methods:

>90 %

Lectures: Using information technology, Lecture, Presentations, Problem solving, Discussions, Seminars and Brain storming

Practical training/ laboratory: Carrying out some chemical experiments in chemistry department lab.

Seminar/Workshop: Field work is still needed

Class activity:

Using computer and data show during discussion

Case Study: None

Other assignments/homework: weekly assignments





If teaching and learning methods were used other than those specified, list and give reasons: None

3- Student assessme	ent:		
Tools	To Measure	Time schedule	Grading
Semester Work	a1, a2, a3, b1, b2, b3 c1, d1 and d3	Fifth week	5 %
Mid-Term Exam	a1, a2, a3, b1, b2, b3, and d2	Seventh week	5 %
Oral exam	a1, a2, a3,a4, a5, b1, b2, b3, b4, d2 and d4	fifteenth week	10 %
Written exam	a1, a2, a3, a4, a5, b1, b2, b3, b4, b5.	sixteenth week	80 %
	Total		100 %

Members of examination committee	Dr. Salah Ahmed Ibrahem Eid
Role of external evaluator	None

- 4- Facilities and teaching materials: Totally adequate Adequate to some extent: Microphones functionality should be checked before semester begins Inadequate List any inadequacies: None
- 5- Administrative constraints

List any difficulties encountered: None

- 6- Student evaluation of the course: None
- 7- Comments from external evaluator(s): None
- 8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required	Person responsible	Progress of action
Deficiency of computer and	Head of the department	The course note is updated and the
Programs. Limited days of field	and all course instructors	instructor helped in developing the
training due to shortage of		practical course experiments
funding from the university.		
Purchasing more specific		
references and tools.		

Action State whether or not completed and give reasons for any non-completion None





9- Action plan for academic year 2022 – 2023

Actions required	Person responsible	Completion date
Update Computer and design new	Head of the department	By the beginning of the
program required to solve the problem	and all course instructors	second semester of the
under studies		academic year 2022-2023
Course coordinator:		
	Prof.Dr.Nahed Fouad	
H	Prof.Dr.Asmaa Aboelsaoud	
Program coordinator:	Prof. Dr. Safinaz M. R	eda
Head of the Department:	Prof. Dr. Wagdy El-Do	ougdoug
Date:	2022-2023	





A- Basic Information		
1- Title and code:	Analytical Chemistry (1)	(242Ch)
2- Program(s) on which this course is	Special Chemistry B.Sc. P	rogram
given:		
3- Year/Level of program:	2022–2023 /Second level.	
	(undergraduate)	
4- Teaching hours	Lectures hrs. /week	2
	Tutorial hrs. /week	0
	Practical hrs. /week	3
	Total hrs. /week	5
4- Credit hours	Total credit hrs.	3

5- Names of lecturers contributing to the delivery of the course:

Dr.Hesham El-Feky
Dr.Islam Shahin
Course coordinator:
Dr.Hesham El-Feky
Dr.Islam Shahin
External evaluator: None

No. of students attending the course:	No. 121	100 %
No. of students completing the course:	No. 121	100 %
Results:		

No. %			Grading of succ	essful stud	lents:
Passed 121		100		No.	%
Failed 0	0	0	Excellent	69	57
			Very Good	35	28.9
			Good	12	10
			Pass	5	4.1





C-Professional Information

1 – Course teaching

Торіс	Lecture hours	Tutorial hours	Practical hours	% of total
1. Introduction to analytical chemistry, quantitative chemical analysis and its principles	2	0	3	7.14%
2. Methods of expressing concentrations	2	0	3	7.14%
3. Equivalent weight, standard solution and its requirements.	2	0	3	7.14%
4. Acids bases titration 1	2	0	3	7.14%
5. Acids bases titration 2	2	0	3	7.14%
6. Theories of indicators used in acid-base titration	2	0	3	7.14%
7. Mid-term exam	2	0	3	7.14%
8. Precipitation titration	2	0	3	7.14%
9. Theories of indicators used in precipitation titration	2	0	3	7.14%
10. Complexometric titration and detect end point and requirements of indicator	2	0	3	7.14%
11. Introduction to gravimetric analysis and different types of Gravimetric Methods		0	3	7.14%
12. Study the different factors affecting the solubility product and the precipitation process	2	0	3	7.14%
13. Study different types of contamination	2	0	3	7.14%
14. Study different types of precipitant (organic and inorganic)	2	0	3	7.14%
Total hours	28	0	42	100%

4 - Teaching and Learning methods against course ILOS:

Topics taught as a percentage of the content specified: >90 % <70%

 $\sqrt{}$

70-90 %

. . . .

Reasons in detail for not teaching any topic: None

If any topics were taught which are not specified, give reasons in detail: None Achieved program intended learning outcomes, ILO's:

Knowledge and Understanding	Intellectual skills	Practical and professional skills	General skills
a1 to a5	b1 to b4	c1 to C3	d1 to d4

2- Teaching and learning methods:

Lectures: Using information technology, Lecture, Presentations, Problem solving, Discussions, Seminars and Brain storming





Practical training/ laboratory: Carrying out some chemical experiments in chemistry department lab.

Seminar/Workshop: Field work is still needed

Class activity:

Using computer and data show during discussion

Case Study: None

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: None

3- Student assessment:

Tools	To Measure	Time schedule	Grading
Semester Work	a1, a2, a3, a5, b2, and d1	Fifth week	3 %
Mid-Term Exam	a1, a2, a3, a4, b2, d1, and d2	Seventh week	3%
Oral exam	a1, a2, a3, a4, b1, b2, b3 and d4	fifteenth week	6 %
Practical exam	c1 to cx3	sixteenth week	40%
Written exam	a1, a2, a3, a4, b1, b2, and b3	seventeenth week	48%
	Total		100 %

Members of examination committee

Dr.Hesham El-Feky			
	Dr.Islam Shahin		
Role of external evaluator	None		
4- Facilities and teaching materia	ls:		
Totally adequate			
Adequate to some extent: Microphones functionality should be checked before semester			
begins			
Inadequate			
List any inadequacies: None			
5- Administrative constraints			

List any difficulties encountered: None

- 6- Student evaluation of the course: None
- 7- Comments from external evaluator(s): None
- 8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required	Person responsible	Progress of action
Development of student skills;	Head of the department	Activity of skills development,
participating of all students (in	and all course instructors	scientific parts supporting the basic
groups) in collecting (using		contents of the course, was
international websites) some		performed
scientific parts supporting the		
basic contents of the course.		
Also, all these activities will be		
evaluated by the instructor of		
the course.		





Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2022 – 2023

Actions required	Person responsible	Completion date
As a continuation in skills development, all students (in groups) will try to make a linkage between the basic theoretical contents of the course and the practical applications that can be used based on these theoretical aspects.	Head of the department and all course instructors	By the beginning of the second semester of the academic year 2022-2023

Course coordinator:

Dr.Hesham El-Feky	
Dr.Islam Shahin	

Program coordinator:	Prof. Dr. Safinaz M. Reda
Head of the Department:	Prof. Dr. Wagdy El-Dougdoug
Date:	2022-2023





A- Basic Information		
1- Title and code:	Green Chemistry and Env	ironment (215Ch)
2- Program(s) on which this course is	Special Chemistry B.Sc. P	rogram
given:		
3- Year/Level of program:	2022–2023 /Second level.	
	(undergraduate)	
4- Teaching hours	Lectures hrs. /week	2
	Tutorial hrs. /week	0
	Practical hrs. /week	0
	Total hrs. /week	2
4- Credit hours	Total credit hrs.	2

5- Names of lecturers contributing to the delivery of the course:		
Prof.Dr. Mohammed Morsy		
Prof.Dr.Abdel Fattah Faded		
Prof.Dr.Kawther Abd elhalim		
Course coordinator:		
Prof.Dr. Mohammed Morsy		
Prof.Dr.Abdel Fattah Faded		
Prof.Dr.Kawther Abd elhalim		
External evaluator: None		

No. of students attending the course:	No. 2	100 %
No. of students completing the course:	No. 2	100 %
Results:		

No. %		%	Grading of successful stude		
Passed	2	100	_	No.	%
Failed 0	0	0	Very Good	1	50
			Pass	1	50





C- Professional Information 1 – Course teaching

Торіс		Tutorial hours	Practical hours	% of total
1. Introduction to green chemistry.	2	0	0	7.14%
2. Green Chemistry – Definition and Principles	2	0	0	7.14%
3. Atom Economy & yield%	2	0	0	7.14%
4. Organic Preparations : acetylation of primary amine (Preparation of acetanilide)-base catalyzed aldol condensation-(Synthesis of dibenzalpropanone)	2	0	0	7.14%
5. (Bromination of trans-stilbene) [4+2] cycloaddition reaction (Diels-Alder reaction between furan and maleic acid	2	0	0	7.14%
 Electrophilic aromatic substitution reaction (Nitration of phenol).Electrophilic aromatic substitution reaction-II (Bromination of acetanilide) 	2	0	0	7.14%
7. Mid-Term Exam.	2	0	0	7.14%
8. Rearrangement reaction (1): (Benzil - Benzilic acid rearrangement)-Pinacol-pinacolone rearrangement - (Preparation of benzopinacolone).	2	0	0	7.14%
 9. Rearrangement reaction – (2) (Rearrangement of diazoamino benzene to p- aminoazobenzene) -radical coupling reaction -(Preparation of 1,1-bis-2-naphthol) 	2	0	0	7.14%
10. Green photochemical reaction: -(Photoreduction of benzophenone to benzopinacol).	2	0	0	7.14%
 Oxidation Reactions: green oxidation reaction (Synthesis of adipic acid)-Three component coupling (Synthesis of dihydropyrimidinone) 	2	0	0	7.14%
12. Solvent-free reaction : (Microwave-assisted ammonium formate-mediated Knoevenagel reaction)Synthesis of Green Reagents (Tetrabutylammonium tribromide (TBATB) and its application)	2	0	0	7.14%
 13. Alternative Green Procedure for Organic Qualitative Analysis: Detection of N, S, Cl, Br and I i) Use of zinc and sodium carbonate instead of metallic sod. ii) Novel use of salt of some organic acids in organic mixture analysis. 	2	0	0	7.14%
14. Alternative Green Procedure for Derivative for Carboxylic Acids.	2	0	0	7.14%
Total hours	28	0	0	100%





Topics taught as a	percentag	e of the cor	tent	specified:	
>90 %	\checkmark	70-90 %		<70%	

Reasons in detail for not teaching any topic: None **If any topics were taught which are not specified, give reasons in detail:** None **Achieved program intended learning outcomes, ILO's:**

Knowledge and Understanding	Intellectual skills	Practical and professional skills	General skills
a1 to a5	b1 to b4	c1 to C2	d1 to d3

2- Teaching and learning methods:

Lectures: Using information technology, Lecture, Presentations, Problem solving, Discussions, Seminars and Brain storming

Practical training/ laboratory: Carrying out some chemical experiments in chemistry department lab.

Seminar/Workshop: Field work is still needed

Class activity:

Using computer and data show during discussion

Case Study: None

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: None

3- Student assessment:

Tools	To Measure	Time schedule	Grading
Semester Work	a1, a2, a3, b2, and d1	Fifth week	5 %
Mid-Term Exam	a1, a2, a3, a4, b2, d1, and d2	Seventh week	5 %
Oral exam	a1, a2, a3, a4, b1, b2, b3, .	fifteenth week	10 %
	and d4		
Written exam	a1, a2, a3, a4,a5, b1, b2, b3.	sixteenth week	80 %
	Total		100 %

Members of examination committee

	Prof.Dr. Mohammed Morsy
	Prof.Dr.Abdel Fattah Faded
	Prof.Dr.Kawther Abd elhalim
None	Role of external evaluator

4- Facilities and teaching materials:

Totally adequate

Adequate to some extent: Microphones functionality should be checked before semester begins

Inadequate

List any inadequacies: None





- **5- Administrative constraints**
 - List any difficulties encountered: None
- 6- Student evaluation of the course: None
- 7- Comments from external evaluator(s): None
- 8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required	Person responsible	Progress of action
Development of student skills;	Head of the department	Activity of skills development,
participating of all students (in	and all course instructors	scientific parts supporting the basic
groups) in collecting (using		contents of the course, was
international websites) some		performed
scientific parts supporting the		
basic contents of the course.		
Also, all these activities will be		
evaluated by the instructor of		
the course.		

Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2022 – 2023

Actions required	Person responsible	Completion date
Actions required As a continuation in skills development, all students (in groups) will try to make a linkage between the basic theoretical contents of the course and the practical applications that can be used based on these theoretical aspects.	Head of the department and all course instructors	By the beginning of the second semester of the academic year 2022-2023

Course coordinator:

Prof.Dr. Mohammed Morsy
Prof.Dr.Abdel Fattah Faded
Prof.Dr.Kawther Abd elhalim

Program coordinator:	Prof. Dr. Safinaz M. Reda
Head of the Department:	Prof. Dr. Wagdy El-Dougdoug
Date:	2022-2023