



University of Mosul
جامعة الموصل



First Cycle – Bachelor's Degree (B.Sc.) - Chemistry

بكالوريوس – علوم الكيمياء



جدول المحتويات

1- نظرة عامة

2 - المقررات الدراسية لمرحلة البكالوريوس 2024-2025

3-معلومات الاتصال

1. نظرة عامة

يقدم هذا الدليل وصفًا للمقررات (الوحدات الدراسية) التي يطرحها برنامج قسم الكيمياء لنيل شهادة البكالوريوس في العلوم. يتضمن البرنامج (48) وحدة دراسية، بمجموع كلي يبلغ (6000) ساعة عمل للطلبة، و(240) وحدة دراسية حسب النظام الأوروبي (ECTS). ويتم تقديم هذه الوحدات الدراسية وفقًا لإطار عملية بولونيا. نظره عامه

2 - المقررات الدراسية لمرحلة البكالوريوس 2024-2025

يتضمن برنامج البكالوريوس في قسم الكيمياء للعام الدراسي 2024-2025 مجموعة من المقررات الدراسية الأساسية والإختيارية، موزعة على الفصول الدراسية بحسب متطلبات التخرج والمعايير المعتمدة في نظام بولونيا. تم تصميم هذه المقررات لتغطية الجوانب النظرية والعملية في فروع الكيمياء المختلفة، ولتعزيز مهارات الطلبة في التفكير العلمي، التحليل، والعمل المختبري. تُدرّس جميع المقررات ضمن هيكل أكاديمي يضمن التدرج في اكتساب المعرفة والمهارات، ويهيئ الطلبة للبحث العلمي أو العمل المهني بعد التخرج.

Module 1

Code	Course/Module Title	ECTS	Semester
CHE1101	Fundamentals of Analytical Chemistry and Qualitative Analysis	7.00	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	4	109	66
Description			
This section includes a description of the module, 100-150 words			

Module 2

Code	Course/Module Title	ECTS	Semester
CHE1102	Fundamentals of inorganic	5.00	1

	chemistry		
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	2	64	61
Description			
This section includes a description of the module, 100-150 words			

Module 3

Code	Course/Module Title	ECTS	Semester
CHE1103	Physics	7.00	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	5	109	66
Description			
This section includes a description of the module, 100-150 words			

Module 4

Code	Course/Module Title	ECTS	Semester
CHE1104	Chemical Security and Safety	5.00	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	2	64	61
Description			
This section includes a description of the module, 100-150 words			

Module 5

Code	Course/Module Title	ECTS	Semester
UoM1105	Democracy and Human Rights	3.00	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	0	49	26
Description			
This section includes a description of the module, 100-150 words			

Module 6

Code	Course/Module Title	ECTS	Semester
UoM1106	Arabic Language	3.00	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	1	49	26
Description			
This section includes a description of the module, 100-150 words			

Model 7

Code	Course/Module Title	ECTS	Semester
CHE1217	Volumetric Analytical Chemistry	7.00	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	5	109	66
Description			
This section includes a description of the module, 100-150 words			

Model 8

Code	Course/Module Title	ECTS	Semester
CHE1218	Ionic Compounds and Periodic table	6.00	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	2	79	71
Description			
This section includes a description of the module, 100-150 words			

Module 9

Code	Course/Module Title	ECTS	Semester
CoS1209	Mathematics	5.00	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	2	64	61
Description			

This section includes a description of the module, 100-150 words

Module 10

Code	Course/Module Title	ECTS	Semester
CoS12010	Geology	5.00	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	2	64	61
Description			
This section includes a description of the module, 100-150 words			

Module 11

Code	Course/Module Title	ECTS	Semester
CoS12011	Cytology	4.00	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	2	64	36
Description			
This section includes a description of the module, 100-150 words			

Module 12

Code	Course/Module Title	ECTS	Semester
UoM12012	English Language	3.00	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	1	49	26
Description			
This section includes a description of the module, 100-150 words			

Module 13

Code	Course/Module Title	ECTS	Semester
CHE23113	Gravimetric Analysis Chemistry	6.00	3
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	4	94	56

Description
This section includes a description of the module, 100-150 words

Module 14

Code	Course/Module Title	ECTS	Semester
CHE23114	Chemistry of Representative Elements	6.00	3
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	3	79	71
Description			
This section includes a description of the module, 100-150 words			

Module 15

Module 15			
Code	Course/Module Title	ECTS	Semester
CHE23015	Thermodynamics	6.00	3
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	3	94	56
Description			
This section includes a description of the module, 100-150 words			

Module 16

Module 16			
Code	Course/Module Title	ECTS	Semester
CHE23016	Organic Chemistry 1	6.00	3
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	3	94	56
Description			
This section includes a description of the module, 100-150 words			

Module 17

Code	Course/Module Title	ECTS	Semester
CoS23017	Computer	3.00	3
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
0	3	49	26

Description
This section includes a description of the module, 100-150 words

Module 18

Code	Course/Module Title	ECTS	Semester
CoS23118	Mathematics and Statistics	3.00	3
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	0	34	41
Description			
This section includes a description of the module, 100-150 words			

Module 19

Code	Course/Module Title	ECTS	Semester
CHE24119	Classical Separation Methods	6.00	4
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	4	94	55
Description			
This section includes a description of the module, 100-150 words			

Module 20

Code	Course/Module Title	ECTS	Semester
CHE24120	Solid State Chemistry	6.00	4
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	4	94	56
Description			
This section includes a description of the module, 100-150 words			

Module 21

Code	Course/Module Title	ECTS	Semester
CHE24121	Phase equilibrium	6.00	4
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	3	94	56

Description
This section includes a description of the module, 100-150 words

Module 22

Code	Course/Module Title	ECTS	Semester
CHE24122	Organic Chemistry 2	6.00	4
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	3	94	56
Description			
This section includes a description of the module, 100-150 words			

Module 23

Code	Course/Module Title	ECTS	Semester
CHE24023	Nanochemistry	3	4
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	1	49	26
Description			
This section includes a description of the module, 100-150 words			

Module 24

Code	Course/Module Title	ECTS	Semester
CHE24024	Chemistry Software	3.00	4
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
0	3	49	26
Description			
This section includes a description of the module, 100-150 words			

Module 25

Code	Course/Module Title	ECTS	Semester
CHE35125	Coordination Chemistry 1	6.00	5
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)

2	4	94	56
Description			
This section includes a description of the module, 100-150 words			

Module 26

Code	Course/Module Title	ECTS	Semester
CHE35126	Chemical Kinetics	6.00	5
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	3	94	56
Description			
This section includes a description of the module, 100-150 words			

Module 27

Code	Course/Module Title	ECTS	Semester
CHE35127	Organic Chemistry 3	6.00	5
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	4	94	56
Description			
This section includes a description of the module, 100-150 words			

Module 28

Code	Course/Module Title	ECTS	Semester
CHE35128	Principles of Biochemistry	6.00	5
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	4	94	56
Description			

This section includes a description of the module, 100-150 words

Module 29

Code	Course/Module Title	ECTS	Semester
CHE35029	Industrial Chemistry and Pollution	4.00	5
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	0	49	51
Description			
This section includes a description of the module, 100-150 words			

Module 30

Code	Course/Module Title	ECTS	Semester
CHE35030	Elective 1	2.00	5
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
1	0	19	31
Description			
This section includes a description of the module, 100-150 words			

Module 31

Code	Course/Module Title	ECTS	Semester
CHE36131	Coordination Chemistry 2	6.00	6
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	4	94	56
Description			
This section includes a description of the module, 100-150 words			

Module 32

Code	Course/Module Title	ECTS	Semester
CHE36132	Electrochemistry and Surface chemistry	6.00	6
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	4	109	41

Description
This section includes a description of the module, 100-150 words

Module 33

Code	Course/Module Title	ECTS	Semester
CHE36133	Organic Chemistry 4	6.00	6
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	4	94	56
Description			
This section includes a description of the module, 100-150 words			

Module 34

Code	Course/Module Title	ECTS	Semester
CHE36134	Biomolecules	6.00	6
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	4	94	56
Description			
This section includes a description of the module, 100-150 words			

Module 35

Code	Course/Module Title	ECTS	Semester
CHE36135	Application of Industrial Chemistry	4.00	6
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	1	49	51
Description			
This section includes a description of the module, 100-150 words			

Module 36

Code	Course/Module Title	ECTS	Semester
CHE36036	Scientific Research Methodology	2.00	6
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)

1	0	19	31
Description			
This section includes a description of the module, 100-150 words			

Module 37

Code	Course/Module Title	ECTS	Semester
CHE47137	Instrumental Analysis	6.00	7
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	4	94	56
Description			
This section includes a description of the module, 100-150 words			

Module 38

Code	Course/Module Title	ECTS	Semester
CHE47138	Identification of Organic Compounds	6.00	7
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	3	79	71
Description			
This section includes a description of the module, 100-150 words			

Module 39

Code	Course/Module Title	ECTS	Semester
CHE47139	Metabolism of Carbohydrates	6.00	7
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	4	94	56
Description			
This section includes a description of the module, 100-150 words			

Module 40

Code	Course/Module Title	ECTS	Semester
CHE47140	Petroleum Chemistry and Petrochemicals	6.00	7

Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	4	109	41
Description			
This section includes a description of the module, 100-150 words			

Module 41

Code	Course/Module Title	ECTS	Semester
CHE47041	Quantum Chemistry	4.00	7
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	1	64	36
Description			
This section includes a description of the module, 100-150 words			

Module 42

Code	Course/Module Title	ECTS	Semester
CHE47042	Elective 2	2.00	7
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
1	0	19	31
Description			
This section includes a description of the module, 100-150 words			

Module 43

Code	Course/Module Title	ECTS	Semester
CHE48143	Chromatographic Methods	6.00	8
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	4	94	56
Description			
This section includes a description of the module, 100-150 words			

Module 44

Code	Course/Module Title	ECTS	Semester
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CHE48144	Application of Organic Spectrum	6.00	8
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	3	79	71
Description			
This section includes a description of the module, 100-150 words			

Module 45

Code	Course/Module Title	ECTS	Semester
CHE48145	Metabolism of Lipids and proteins	6.00	8
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	4	94	56
Description			
This section includes a description of the module, 100-150 words			

Module 46

Code	Course/Module Title	ECTS	Semester
CHE48146	Polymers: Fundamentals and applications	6.00	8
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	5	109	41
Description			
This section includes a description of the module, 100-150 words			

Module 47

Code	Course/Module Title	ECTS	Semester
CHE48147	Spectroscopy	4.00	8
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3	1	64	36
Description			
This section includes a description of the module, 100-150 words			

Module 48

Code	Course/Module Title	ECTS	Semester
CHE48148	Research Project	2.00	8
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
0	2	33	17
Description			
This section includes a description of the module, 100-150 words			

3- معلومات الاتصال**مدير البرنامج**

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التوقيع:

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دقق الملف من قبل

 شعبة ضمان الجودة والأداء الجامعي
 اسم مدير شعبة ضمان الجودة والأداء الجامعي: د. حميد الحادي