

ACADEMIC PROGRAM CURRICULUM STRUCTURE FORM

Degree: Bachelor of Education in Secondary Education

With Concentrations in **Chemistry**

Fall 2024 (updated offering semesters)

1. Overall Curriculum Structure

Table 1.1 *Overall Curriculum Structure*

Curriculum Component	Total Number of	
	Courses	Credit Hours
Core Curriculum Requirements	11	33
Major Requirements	10	36
Concentration Requirements	15	45
Free Electives (if applicable)	2	6
Other Packages: _____		
Total:		120

2. Detailed Curriculum Structure

2.1. Core Curriculum Requirements, (33 CH)

For each package, students must take specific number of credit hours from the list of courses listed for that package as detailed in the following table.

Table 2.1 Core Curriculum Requirements

اسم الحقيبة Package Title	رمز المقرر ورقمه Course Id.	اسم المقرر Course Title	عدد الساعات المكتسبة Nb. of Credit Hours per Course	عدد الساعات الفعالية Nb. of Contact Hours		المتطلب السابق Pre- Requisites	عدد الساعات المكتسبة لكل حقيبة Nb. of Credit Hours per Package
				Theo نظري	Lab. عملي		
مجموعة الهوية والتواصل (18 CH) Identity & Communication Package (18 CH)	ARAB 100	اللغة العربية 1 Arabic Language	3	3	-		6
	ARAB 200	اللغة العربية 2 Arabic Language II	3	3	-	ARAB 100	
	ENGL 202	اللغة الإنجليزية I مابعد التأسيسي ENGLISH Language I Post Foundation	3	2	3		6
	ENGL 203	اللغة الإنجليزية II مابعد التأسيسي ENGLISH Language II Post Foundation	3	2	3		
	DAWA 111	الثقافة الإسلامية Islamic Culture	3	3	-		3
	HIST 121	تاريخ قطر History of Qatar	3	3	-		3
مجموعة العلوم الاجتماعية / السلوكية Social – Behavioural science (3 CH) http://www.qu.edu.qa/ar/core/student-information/packages		يختار الطالب مقررًا واحدًا من قائمة المقررات المعتمدة من متطلبات الجامعة في هذه الحقيبة Students choose from approved Core Curriculum List	3				3

<p>مجموعة العلوم الطبيعية / الرياضيات Natural Sciences – Mathematics (3 CH)</p> <p>http://www.qu.edu.qa/ar/core/student-information/packages</p>		<p>طلاب التعليم الثانوي: الرياضيات ، الأحياء ، الكيمياء ، الفيزياء ، وطلاب التعليم الابتدائي: الرياضيات والعلوم ، الطفولة المبكرة ، واللغة الإنجليزية كلغة ثانية ابتدائي ، يجب ألا يأخذوا MATH 105. يمكنهم اختيار أي مقرر آخر محدد في هذه الحقيبة. بالإضافة إلى ذلك يجب على الطلاب تخصص الرياضيات ألا يأخذوا الرياضيات 103. يمكنهم اختيار أي مقرر آخر محدد في هذه الحقيبة.</p> <p>Students selecting concentration areas in Mathematics, Biology, Chemistry, Physics, Math and Science, Primary Education, Early Childhood, English Primary ESL, should not take MATH 105. They may select any other course defined in this package. In addition, Students selecting a concentration area in Mathematics should not take MATH 103. They may select any other course defined in this package.</p>	3				3
<p>مجموعة المعارف والمهارات الأساسية Core Knowledge and Skills Package (6 CH)</p> <p>http://www.qu.edu.qa/ar/core/student-information/packages</p>		<p>يجب على طلاب تخصص الكيمياء إكمال متطلبات هذه الحزمة من خلال إكمال 6 ساعات معتمدة في المقررات المدرجة في حقيبة المعارف والمهارات الأساسية</p> <p>Students selecting the Chemistry concentration area must complete this package requirements by completing 6 CH in courses listed in the CCP defined Core Knowledge and Skills Package.</p>	6				6
<p>المتطلبات العامة التكميلية للكلية Supplemental College/Program Package (3 CH)</p>	UNIV 100	<p>سيمينار السنة الأولى First Year Seminar</p>	3				3
<p>المجموع الكلي Total</p>							33

2.2. Major Requirements (36 CH)

Students must complete 30 CH from the courses listed below in addition to completing

6 CH from courses listed in the Methods sub-package related to the concentration area selected by the student.

2.2.1. Major Core Requirements Package (36 CH)

Course No.	Course Name	No. of hours			Course Prerequisites المتطلبات السابقة	Offering Semester(s) فصول الطرح
		CH	Theory	Exp.		
EDUC 310	Foundation of Education in Qatar and School Reform	3	3	0		F
EDUC 312	Curriculum & Assessment	3	3	0		S
EDUC 316	Classroom Management	3	3	0	EDUC 310, 312 & 320, Students must have completed a minimum of 60 CH	S/F خريف / ربيع
EDUC 317	Inclusive Classrooms	3	3	0		S/F خريف / ربيع
EDUC 320	Human Development	3	3	0		S/F خريف / ربيع
EDSE 331	Reading and Writing Across the Curriculum	3	3	0	EDUC 310 & EDUC 312 & EDUC 320	S/F خريف / ربيع
EDUC 319	Classroom Assessment	3	3	0	EDUC 310, 312 & 320, Students must have completed a minimum of 60 CH	S/F خريف / ربيع
EDSE 491	Student Teaching in Secondary Education	9	9	All Coursework	All Coursework	S
Methods for Chemistry sub-package						
EDSE 346	Methods I: Instructional Strategies for Chemistry	3	3	Field work	EDSE 331	S
EDSE 466	Methods II: Inquiry and ICT for Chemistry	3	3	Micro teaching	EDSE 346	F

2.3. Concentration Requirements for Chemistry Students (45 CH)

Students must complete a minimum of 45 credit hours by completing the following courses in concentration requirements:

على الطالب تسجيل جميع المقررات في الحقيبة وحسب وقت طرح

Table 2.3.1 Chemistry Subject Courses (45 CH)

Table 2.3.1 Courses in Concentration Requirements

Course Id.	Course Title	Nb. of Credit Hours	Nb. of Contact Hours		Course Prerequisites المتطلبات السابقة	Course Co-Requisites	Offering Semester(s) فصول الطرح
			Theo.	Lab.			
CHEM 101	General Chemistry I	3	3	-	-		F
CHEM 102	General Chemistry II	3	3	-	CHEM 101		S
CHEM 103	Experimental General Chemistry I	1	-	3	CHEM 101		F
CHEM 104	Experimental General Chemistry II	1	-	3	CHEM 103 AND CHEM 102		S
BIOL 101	Biology I	3	2	1	-		F&S
GEOL 101	Principle of Geology	3	2	2	-		F&S
PHYS 183	Introduction to General Physics	3	3	-	-		S
CHEM 217	Organic Chemistry I	3	3		CHEM 101 AND CHEM 103		F
CHEM 218	Experimental Organic Chemistry I	1		3	(CHEM 103 AND (CHEM 217 with concurrency))		F
CHEM 310	Organic Chemistry II	3	3		CHEM 209 OR CHEM 211 OR CHEM 217		S
CHEM 313	Experimental Organic Chemistry II	1		3	(CHEM 218 AND (CHEM 310 with concurrency))		S
CHEM 221	Inorganic Chemistry I	3	3	-	CHEM 101		F
CHEM 222	Experimental Inorganic Chemistry	1	-	3	CHEM 103 AND CHEM 221		S
CHEM 237	Analytical Chemistry I	3	3		CHEM 101 AND CHEM 103		F
CHEM 238	Experimental Analytical Chemistry I	1		3	CHEM 103 AND (CHEM 237 with concurrency) OR (CHEM 103 AND (CHEM 231 with concurrency))		F
CHEM 241	Physical Chemistry I	3	3	-	CHEM 102		F
CHEM 242	Experimental Physical Chemistry I	1	3	-	CHEM 104 And CHEM 241		F
CHEM 337	Analytical Chemistry II	3	3		(CHEM 231 OR CHEM 237) AND (CHEM 338 with concurrency)		S
CHEM 338	Experimental Analytical Chemistry II	1		3	(CHEM 234 OR CHEM 238) AND (CHEM 337 with concurrency)		S
CHEM 351	Basic Biochemistry	3	3	-	CHEM 209 OR CHEM 212 OR CHEM 310		F
CHEM 352	Experimental Basic Biochemistry	1	-	3	CHEM 209 OR CHEM 218 AND (CHEM 351 with concurrency)		F

2.4 Major Electives (6 CH)

Students must take 6 credit hours from the list of courses listed in the following table.

Table 2.4 *Courses in Free Electives*

Course Id.	Course Title	Nb. of Credit Hours	Nb. of Contact Hours		Course Prerequisites	Course Co-Requisites	Offering Semester(s)
			Theo.	Lab.			
EDUC 100	Photography	3	3				-
EDUC 200	Education and Societal Problems	3	3				F&S
EDUC 201	Research Methodology	3	3				F&S
EDUC 203	Family Relationships	3	3				F&S
EPSY 201	Introduction to Psychology	3	3				F&S
EPSY 205	Social Psychology	3	3				F&S

UNDERGRADUATE CATALOG
Approved 2012-2013 Degree Requirements
Suggested Study Plan
Bachelor of Education in Secondary Education
Chemistry Concentration

FIRST YEAR [33] credit hours)				SECOND YEAR [33] credit hours)			
Fall Semester				Fall Semester			
Course #	Course Title	Cr Hrs.	Pre-requisite	Course #	Course Title	Cr Hrs.	Pre-requisite
	Core Requirement	3		EDSE 331	Reading and Writing Across the Curriculum	3	EDUC 310, EDUC 312 & EDUC 320
	Core Requirement	3			Core Requirement	3	
	Core requirement	3		CHEM 103	Experimental General Chemistry I	1	CHEM 101
EDUC 310	Foundation of Education& School Reform	3		CHEM 217	Organic Chemistry I	3	CHEM 101 AND CHEM 103
				CHEM 218	Experimental Organic Chemistry I	1	(CHEM 103 AND (CHEM 217 with concurrency))
CHEM 101	General Chemistry I	3		CHEM 237	Analytical Chemistry I	3	CHEM 101ANDCHEM 103
				CHEM 238	Experimental Analytical Chemistry I	1	CHEM 103 AND (CHEM 237 with concurrency) OR (CHEM 103 AND (CHEM 231 with concurrency))
					Core Requirement	3	
Total Credit Hours in Semester [15]				Total Credit Hours in Semester [18]			
Spring Semester				Spring Semester			
Course #	Course Title	Cr Hrs.	Pre-requisite	Course #	Course Title	Cr Hrs.	Pre-requisite
	Core Requirement	3		CHEM 104	Exp. General Chemistry II	1	CHEM 103 and CHEM 102
	Core Requirement	3		EDUC 317	Inclusive Classroom	3	
EDUC 312	Curriculum & Assessment	3		GEOG 101	Principles of Geology	3	
EDUC 320	Human Development	3		PHYS 183	Intro. to General Physics	3	
CHEM 102	General ChemistryII	3	CHEM 101	CHEM 310	Organic Chemistry II	3	CHEM 209 OR CHEM 211 OR CHEM 217
	Core Requirement	3		CHEM 313	Experimental Organic Chemistry II	1	(CHEM 218 AND (CHEM 310 with concurrency))
Total Credit Hours in Semester [16]				Total Credit Hours in Semester [16]			

THIRD YEAR [33] credit hours)				FOURTH YEAR [33] credit hours)			
Fall Semester				Fall Semester			
Course #	Course Title	Cr Hrs.	Pre-requisite	Course #	Course Title	Cr Hrs.	Pre-requisite
	Core Requirement	3		EDSE 466	Methods II: Inquiry and ICT for Chemistry	3	EDSE 346
EDUC 319	Classroom Assessment	3	EDUC 310, EDUC 312 & EDUC 320	BIOL 101	Biology 1	3	
	Elective (Education)	3			Core Requirement	3	
CHEM 221	Inorganic Chemistry 1	3	CHEM 101	CHEM 242	Experimental Physical Chemistry	1	CHEM 104 And CHEM 241
CHEM 241	Physical Chemistry 1	3	CHEM 102	CHEM 352	Exp. Basic Biochemistry	1	CHEM 209 OR CHEM 218 AND (CHEM 351 with concurrency)
				CHEM 351	Basic Biochemistry	3	CHEM 209 OR CHEM 212 OR CHEM 310
				EDUC 316	Classroom management	3	EDUC 310, EDUC 312 & EDUC 320
Total Credit Hours in Semester [15]				Total Credit Hours in Semester [17]			
Spring Semester				Spring Semester			
Course #	Course Title	Cr Hrs.	Pre-requisite	Course #	Course Title	Cr Hrs.	Pre-requisite
EDSE 346	Methods I: Instructional Strategies in Chemistry	3	EDSE 331	EDSE 491	Student Teaching in Secondary Education	9	All Coursework
	Core Requirement	3					
	Elective (Education)	3					
CHEM 222	Exp. Inorganic Chemistry	1	CHEM 103 AND CHEM 221				
CHEM 337	Analytical Chemistry II	3	CHEM 101 AND CHEM 103				
CHEM 338	Experimental Analytical Chemistry II	1	CHEM 103 AND (CHEM 237 with concurrency) OR (CHEM 103 AND (CHEM 231 with concurrency))				
Total Credit Hours in Semester [14]				Total Credit Hours in Semester [9]			