

Ministry of education
Majmaah University
College of education
Department of Chemistry



Majmaah University Faculty of Education – Al zulfi

Department of Chemistry Module Objectives Matrix

CHEMISTRY

CHEMISTRY

Model Objectives Matrix

Learning Objective A statement in specific and measurable terms that describes what the learner will know or be able to do as a result of engaging in a learning activity.

Taxonomies of educational objectives can be consulted as useful guides for developing a comprehensive list of student outcomes. Taxonomies attempt to identify and classify all different types of learning.

Table 1: Objectives of Chemistry Program

1	Achieving Academic excellence in accordance with quality standards.
2	Prepare national competences in the field of chemistry who contribute to the making of society, development programs insofar as education, health, industry and scientific research are concerned.
3	To participate in the advancement of knowledge through seminars, workshops and publications.
4	Serving state and private sectors by increasing people's awareness of chemistry and exchange programs.
5	Integrating IT in curriculum design in relation to Chemistry.

Learning outcomes

Learning outcomes are statements of the knowledge, skills and abilities individual students should possess and can demonstrate upon completion of a learning experience or sequence of learning experiences. Before preparing a list of learning outcomes consider the following recommendations:

Table 2: Program Learning Outcomes of Chemistry Program

Domain		** Student learning Outcomes	
		On successful completion of this program, students would be able to:	
		Code	Learning Outcome
A	Knowledge	a1	Recognize the knowledge of fundamental concepts in Chemistry
		a2	Covering the major principles and theories in the field of chemistry
		a3	Introducing students to the prominent teaching methods and approaches in relation to chemistry.
		b1	Explain to general audience the Chemistry principles that underlie our understanding of nature

B	Cognitive Skills	b2	Develop the skill for analyzing/solving the Chemistry based problems.
		b3	Think creatively about scientific problems and their solutions
		b4	Applying the acquired academic skills to professional and academic contexts.
C	Interpersonal Skills and Responsibility	c1	An ability to work effectively in diverse teams in both classroom and laboratory.
		c2	Taking the initiative to identify urgent problems and solve them.
		c3	Assuming responsibility for self-learning and professional development.
		c4	Showing high commitment to work ethics in accordance with Islamic values
D	Communication IT and Numerical Skills	d1	Think creatively about scientific problems and their solution, both orally and in written
		d2	Locate and retrieve scientific information, using modern computer tools
		d3	Learn how to collect and classify the required topics using internet communication tools.
E	Psychomotor Skills		N.A

**** All students in the Bachelor's Degree Program in Chemistry have the same major subject ,Chemistry.**

Model Code: MUP013

Faculty: Az Zulfi College of Education

Department: Chemistry

Program: Chemistry

		A _{NCAAA}				B _{NCAAA}						C _{NCAAA}					D _{NCAAA}			E _{NCAAA}		
		A 1	A 2	A 3	A 4	B 1	B 2	B 3	B 4	B 5	B 6	C 1	C 2	C 3	C 4	C 5	D 1	D 2	D 3			
modules	CHEM111	I	I	I		I	I								I		I	I	I			
	EDU 116			I			I		I				I	I	I		I	I				
	EDU 117			I			I		I													
	EDU 118			I			I		I				I	I	I		I	I				
	MATH 111	I				I							I		I			I				
	PHYS 111	I				I			I				I									
	CHEM121	I	I			I	I						I		I	I						
	CHEM122	I	I			I	I		I						I							
	COMP125	I	I	I		I	I									I						
	EDU 126			I			I		I				I	I	I							
	MATH123																					
	STAT 101																					
	CHEM211	R	R			R	R		R	R			R	R	R							
	CHEM 212	R	R			R	R		R				R		R	R						
CHEM 213	R	R			R	R		R	R			R	R	R	R							

I: Introduce

R: Reinforce

E: Emphasize.

I, R, E Matrix

Model Code: MUP013

Faculty: Az Zulfı College of Education

Department: Chemistry

Program: Chemistry

A _{NCAAA}				B _{NCAAA}						D _{NCAAA}			E _{NCAAA}							
A 1	A 2	A 3	A 4	B 1	B 2	B 3	B 4	B 5	B 6	C 1	C 2	C 3	C 4	C 5	D 1	D 2	D 3			
		R			R		R				R	I	R		R	R				
		R			R		R				R	I	R		R	R				
R				R			R				R									
E	E			E	E		E	E			E	E	E	I	E	E	E			
I	I	I		I	I		I	I					R	R	R	R	R			
E	E			E	E		E	E			R		E	I	E	E	E			
I	I	I		I	I		I	I			R	R	R	R	R	R	R			
R	R	R		R	R		R	R			R		R	R	R	R	R			
		R			R		R					R	R		R	R				
R	R	R		R	R		R	R			R		R	R	R	R	R			
R	R	R		R	R		R	R			R	R	R	R	R	R	R			
R	R	R		R	R		R	R			R	R	R	R	R	R	R			
		R			R		R				R	R	R	I	R	R				

modules

I: Introduce

R: Reinforce

E: Emphasize.

I, R, E Matrix

Model Code: MUP012

Faculty: Az Zulfy College of Education

Department: Chemistry

Program: Chemistry

		A _{NCAAA}				B _{NCAAA}						D _{NCAAA}			E _{NCAAA}							
		A 1	A 2	A 3	A 4	B 1	B 2	B 3	B 4	B 5	B 6	C 1	C 2	C 3	C 4	C 5	D 1	D 2	D 3			
modules	EDU317			R			R		R				R	R	R	I	R	R				
	CHEM321	R	R			R	R		R	R			R	E	R	I	R	R				
	CHEM322	R	R			R	R		R						R	R	R	R				
	CHEM323	E	E	E		R	R		R	R			E	R	E	R	E	E	E			
	CHEM324	R	R			R	R		R	I			I	I	R	I	E	E	I			
	EDU 326			I			I		I	I			I	I	I		I	I				
	EDU 327			R			R		R				R	R	R		R	R				
	CHEM411	E	E	E		E	E		E	E			E	R	R	R	E	E				
	CHEM411	E	E	E		E	E		E	E			E	R	R	R	E	E	E			
	CHEM411	E	E			E	E		E	E			I	E	E	E	E	E				
	EDU 416			R			R		R				R	R	R		R	R				
	EDU 417			E			E		E				E	E	E		E	E				
	CHEM421	E	E			E	E		E	E			E	E	E	I	E	E				
	CHEM421	E	E			E	E		E	E			E		E	I	E	E	E			
	EDU426			E			R		R				E	E	E		E	E				
	CHEM421	E	E			E	E		E	E			E	E	E	I	E	E	E			
CHEM421	R	R			R	R		R	R			R		R	R	R	R	R				