# Republic of Iraq Ministry of Higher Education & Scientific Research Supervision and Scientific Evaluation Directorate Quality Assurance and Academic Accreditation

# Academic Program Specification Form For The Academic

University: Anbar College: Science

Department: Biology

Date Of Form Completion: 12/9/2022

Dean's Name

Dean's Asst. forScientific Affairs

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Date: 15/9/2022

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Quality Assurance and University Performance Manager

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Date: 15/9/2022



#### TEMPLATE FOR PROGRAMME SPECIFICATION

#### HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

#### PROGRAMME SPECIFICATION

This Program Specification provides a concise summary of the main features of the program and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It is supported by a specification for each course that contributes to the program.

1. Teaching Institution	University of Anbar
2. University Department/Centre	Biology
3. Program Title	Bachelor
4. Title of Final Award	Bachelor - Biology
5. Modes of Attendance offered	Semester
6. Accreditation	Biology
7. Other external influences	
8. Date of production/revision of	12/9/2022
this specification	

#### 9. Aims of the Program

Upgrading the level of biological sciences in all fields.

And conveying what is new about these sciences to serve the community Raising the economic level of the country

Providing relevant institutions and departments with technical and scientific cadres of new graduates

Joint cooperation with state institutions and the private sector in order to conduct scientific research to solve related problems

<ul> <li>10. Learning Outcomes, Teaching, Learning and Assessment Methods</li> <li>A. Knowledge and Understanding</li> <li>A1. Choosing the best modern scientific methods in delivering information to students through a professional teaching staff.</li> <li>A2. Providing students with scientific and practical biological experiences in all its branches through practical application in the department's laboratories and multiple field trips.</li> <li>A3. Holding the summer field course for students of the last stage for a period of</li> </ul>
one month  B. Subject-specific skills
D. Subject-specific skins
The department aims to graduate scientific cadres capable of working in each of
the following:
1- Building the research and analytical capacity of the students
2- Develop the deductive side of the students
3- Teaching students to deal with scientific equipment
Teaching and Learning Methods
☐ Explanation and clarification through lectures.
☐ Method of displaying scientific materials on display devices: data show, plasma
creens.
Self-learning through homework and mini-projects within the lectures.
Continuous weekly Quizzes
Guide students to some sources to benefit and expand the students' perceptions in
bsorbing the scientific material
Laboratories.
Graduation projects.
☐ Scientific visits
Seminars and seminars held in the department.
Summer training.
Assessment methods
Short exams
☐ Homework
☐ Semester and final exams for theoretical and practical subjects
☐ Small projects within the lesson
☐ Presentation of activities
Semester and final exams and activities

#### C. Thinking Skills

- 1- Develop the student's ability to absorb the specialization and deal with it flexibly
- 2- Create a state of familiarity with the vocabulary of the specialty
- 3- Advancing the responsibility in serving the community and the country through this competence

#### **Teaching and Learning Methods**

Managing the lecture in an applied manner linked to the reality of daily life to attract the student to the topic of the lesson without moving away from the core of the topic so that the material is flexible and capable of understanding and analysis.

Assigning the student some group activities and duties.

Allocate a percentage of the grade for daily assignments and tests.

#### **Assessment methods**

Active participation in the classroom is evidence of student commitment and responsibility.

Commitment to deadlines for submitting assignments and research

The quarterly and final exams express commitment and cognitive and skill achievement

Applications, exercises and daily assignments

General and Transferable Skills (other skills relevant to employability andpersonal development) D1. Develop the student ability to deal with technical means. D2. Develop the student ability to deal with internet. D3. Develop the student ability to deal with multimedia. D4. Develop the student ability to dialogue and discussion.
Teaching and Learning Methods
<ul> <li>Presenting the courses in a clear and simplified manner with the use of correspondence and illustrative charts and presentation through the power point technique.</li> <li>Classroom and laboratory exercises and activities</li> <li>Weekly and quarterly assignments and reports.</li> <li>Guidance to scientific references to expand understanding of course details.</li> <li>Visits and field trips to work sites.</li> </ul>
Assessment Methods

- Surprise daily tests or e	xams (Ouizzes).
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- Participation in the classroom.Presentation of activities.
- Semester and final exams.

11. Program	Structure			12. Awards and Credits
Level/Year	Course or Module Title	Practical	theoretical	
1st	Zoology	6	2	Bachelor Degree
1st	Analytical chemistry	6	2	Requires (x) credits
1st	Physics-1	6	2	
1st	Arabic		2	
1st	Human Rights		2	
1st	Mathematics		2	
1st	Geology-1	6	2	
1st	English-1		2	
1st	Computer	6	2	
1st	Botany	6	2	
1st	Organic chemistry	6	2	
1st	Physics-2	6	2	
1st	Mathematics-2		2	
1st	Geology-2		2	
1st	English-2	6	2	1
1st	Human Rights-2		2	

Entomology	6	2
plant anatomy	6	2
Invertebrates	6	2
Computer-1	6	2
Biochemistry-1	6	2
Microbiology-1	6	2
Classification of entomology	6	2
plant taxonomy	6	2
plant group science	6	2
parasites	6	2
Computer-2	6	2
Biochemistry-2	6	2
Microbiology-2	6	2
English		2
Plant physiology	12	4
Microbiological physiology	12	4
Ecology	12	4
Cytology	12	4
microscopic technique	12	4
Histology	12	4
English		4
Genetics	12	4
	plant anatomy Invertebrates Computer-1 Biochemistry-1 Microbiology-1 Classification of entomology plant taxonomy plant group science parasites Computer-2 Biochemistry-2 Microbiology-2 English Plant physiology Microbiological physiology Ecology Cytology microscopic technique Histology English	plant anatomy 6 Invertebrates 6 Computer-1 6 Biochemistry-1 6 Microbiology-1 6 Classification of entomology plant taxonomy 6 plant group science 6 parasites 6 Computer-2 6 Biochemistry-2 6 Microbiology-2 6 English Plant physiology 12 Microbiological physiology Ecology 12 Cytology 12 microscopic 12 technique Histology 12 English

3rd	Microbiology of soil and water	12	4
3rd	Physiology	12	4
3rd	Environmental pollution	12	4
3rd	Microbial enzymes	12	4
3rd	Immunology	12	4
3rd	Research Method		4
4th	Molecular biology	6	2
4th	Food microbiology	6	2
4th	Bacterial toxins	6	2
4th	Mycology	6	2
4th	pathogenic bacteria	6	2
4th	Biotechnology and genetic engineering	6	2
4th	Genetics of microbiology	6	2
4th	Industrial Microbiology	6	2
4th	Endocrinology	6	2
4th	Classification of fungi	6	2
4th	Virology	6	2
4th	chordates	6	2
4th	Antibiotics	6	2
4th	Research project	6	

4th English 2
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#### 13. Personal Development Planning

Follow up, Support and guide outstanding students and build their mental and scientific capabilities in line with their abilities and orientations in different branches.

#### 14. Admission criteria.

Students who graduate from the sixth middle school accept the biological or applied branch with a rate of at least 80 %, in addition to the possibility of private admission.

#### 15. Key sources of information about the program

One of the most important sources of information for the study program is the reliance on the curricula and courses that are recognized in colleges and scientific departments in English and American universities. In addition to communicating with institutions and state departments that possess biological cadres to set study programs that contribute to the graduation of students with scientific and applied experiences, In order to work in the relevant department and institutions, As well as supporting postgraduate programs.

### Curriculum Skills Map

## please tick in the relevant boxes where individual Program Learning Outcomes are being assessed

# Program Learning Outcomes

Year	CourseTitle	Core (C)		nowle ınders			Sı		-specif skills	ic	Th	inkin	g Ski	lls	Ski	eral and 'ills (or) ( ant to endersonal	Other ski nployab	ills ility
Level		Option(O)	<b>A1</b>	<b>A2</b>	<b>A3</b>	<b>A4</b>	<b>B1</b>	<b>B2</b>	В3	<b>B4</b>	C1	<b>C2</b>	C3	<b>C4</b>	D1	<b>D2</b>	D3	<b>D4</b>
1st	Zoology	С					$\sqrt{}$				$\sqrt{}$				$\sqrt{}$	$\checkmark$		
1st	Analytical chemistry	С	<b>√</b>				$\sqrt{}$											
1st	Physics-1	C					$\sqrt{}$											
1st	Arabic	C					$\sqrt{}$											
1st	Human Rights	C	$\sqrt{}$				$\sqrt{}$											
1st	Mathematics	C					$\sqrt{}$											
1st	Geology-1	C					$\sqrt{}$											
1st	English-1	C					$\sqrt{}$	$\sqrt{}$			$\sqrt{}$				$\sqrt{}$	$\sqrt{}$		
1st 1st	Computer Botany	С	√				<b>√</b>				√				<b>√</b>	√		
1st 1st	Organic chemistry Physics-2	С	<b>√</b>				V											
1st 1st	Mathematics-2 Geology-2	С	<b>√</b>				V											
1st	English-2	C					V											
1st	Human Rights-2	С																
		C		$\sqrt{}$			$\sqrt{}$	$\sqrt{}$			$\sqrt{}$	$\sqrt{}$			$\sqrt{}$	$\sqrt{}$		

2nd	Entomology													
2nd	plant anatomy													
2nd	Invertebrates	С	V									V		
2nd	Computer-1	C												
2nd	Biochemistry-1	С										$\sqrt{}$	$\sqrt{}$	
2nd	Microbiology-1	C												
2nd	Classification of					√						$\sqrt{}$		
2nd	entomology	С												
	plant taxonomy					,								
2nd	plant group science	С	√									V		
2nd	parasites			,		- 1			,			-		
2nd	Computer-2	С	1	√		<b>√</b>			√			V		
2nd	Biochemistry-2		1			- 1			1			1		
2nd	Microbiology-2	С				V						V		
	English													
3rd	Dlant physiology		V	V		V	V		V	V		V	<b>√</b>	
3rd	Plant physiology Microbiological	С	V	V		V	V		V	V		V	V	
Jiu	physiology	C												
3rd	Ecology		V	V		V	V		<b>√</b>					
3rd	Cytology	С	<u> </u>	<u> </u>		•	<u> </u>		<u> </u>			<u> </u>	•	
3rd	microscopic		V	V		<b>√</b>	V		V	$\sqrt{}$				
3rd	technique	С												
	Histology													
3rd	English	C	V			V			<b>√</b>			V		
3rd	Genetics	С												
3rd	Microbiology of soil	C	$\sqrt{}$	V		<b>√</b>	V		V	$\sqrt{}$		<b>√</b>	√	
3rd	and water	С												

	Physiology														
3rd	Environmental		$\sqrt{}$				<b>√</b>		V			<b>√</b>	<b>√</b>		
3rd	pollution Microbial enzymes	С													
3rd 3rd	Immunology Research Method	С	√			<b>√</b>									
4th 4th	Molecular biology Food microbiology	С	<b>√</b>	V		V	V		V	V		V	V		
4th 4th	Bacterial toxins Mycology	С	<b>√</b>	1		<b>√</b>	√		<b>√</b>	<b>√</b>		V	V		
4th 4th	pathogenic bacteria Biotechnology and genetic engineering	С	<b>√</b>	1		1	V		<b>√</b>	<b>√</b>		<b>V</b>	V		
4th 4th	Genetics of microbiology Industrial Microbiology	С	<b>√</b>			V			√ 			V			
4th 4th	Endocrinology Classification of fungi	С	<b>√</b>			<b>√</b>			√			V			
4th 4th	Virology chordates	С	<b>√</b>	<b>√</b>		<b>√</b>	√		√	<b>√</b>		<b>√</b>	V		
4th 4th	Antibiotics Research project	О	√	√	√	<b>√</b>	√		<b>√</b>	<b>√</b>		<b>√</b>	V	<b>V</b>	
4th 4th	English	С	<b>√</b>	<b>√</b>		<b>√</b>	<b>√</b>		√	<b>√</b>		<b>V</b>	V		