

## Academic Program Description



University of Anbar

Faculty/Institute: College of Science

Scientific Department: Biology

Academic or Professional Program Name: Bachelor in Biology

Final Certificate Name: Bachelor in Biology

Academic System: Semesters

Description Preparation Date: 1/ 11/ 2024

File Completion Date: 1/ 2/ 2025

Signature:

Head of Department Name:

Date: June - 23. 2025

Signature:

Scientific Associate Name:

Date: 23/6/2025

The file is checked by:

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Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date: 23/6/2025

Signature:



Approval of the Dean

أ.د. عطية رمزي عبد الغفور  
العميد

## 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 this specification	1/ 2/ 2025
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	

## **10. Learning Outcomes, Teaching, Learning and Assessment Methods**

### **A. Knowledge and Understanding**

- A1.Choosing the best modern scientific methods in delivering information to students through a professional teaching staff.
- 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.
- A3.Holding the summer field course for students of the last stage for a period of one month

### **B. Subject-specific skills**

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 screens.
- ☐ 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 absorbing 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

	<p>General and Transferable Skills (other skills relevant to employability and personal development)</p> <p>D1. Develop the student ability to deal with technical means.</p> <p>D2. Develop the student ability to deal with internet.</p> <p>D3. Develop the student ability to deal with multimedia.</p> <p>D4. Develop the student ability to dialogue and discussion.</p>
	Teaching and Learning Methods
	<ul style="list-style-type: none"> <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

		<ul style="list-style-type: none"> <li>- Surprise daily tests or exams (Quizzes).</li> <li>- Participation in the classroom.</li> <li>- Presentation of activities.</li> <li>- Semester and final exams.</li> </ul>		
11. Program Structure				12. Awards and Credits
Level/Year	Course or Module Title	Practical	theoretical	
1st	Zoology	6	2	Bachelor Degree Requires ( x ) credits
1st	Analytical chemistry	6	2	
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	
1st	Human Rights-2	---	2	

2nd	Entomology	6	2
2nd	plant anatomy	6	2
2nd	Invertebrates	6	2
2nd	Computer-1	6	2
2nd	Biochemistry-1	6	2
2nd	Microbiology-1	6	2
2nd	Classification of entomology	6	2
2nd	plant taxonomy	6	2
2nd	plant group science	6	2
2nd	parasites	6	2
2nd	Computer-2	6	2
2nd	Biochemistry-2	6	2
2nd	Microbiology-2	6	2
2nd	English	----	2
3rd	Plant physiology	12	4
3rd	Microbiological physiology	12	4
3rd	Ecology	12	4
3rd	Cytology	12	4
3rd	microscopic technique	12	4
3rd	Histology	12	4
3rd	English	---	4
3rd	Genetics	12	4

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 / Level	CourseTitle	Core (C) Title or Option(O)	Knowledge and understanding				Subject-specific skills				Thinking Skills				General and Transferable Skills (or) Other skills relevant to employability and personal development			
			A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3	D4
1st	Zoology	C	√				√				√				√	√		
1st	Analytical chemistry	C	√				√											
1st	Physics-1	C	√				√											
1st	Arabic	C	√				√											
1st	Human Rights	C	√				√											
1st	Mathematics	C	√				√											
1st	Geology-1	C	√				√											
1st	English-1	C	√	√			√	√			√				√	√		
1st	Computer Botany	C	√				√				√				√	√		
1st	Organic chemistry	C	√				√											
1st	Physics-2	C																
1st	Mathematics-2	C	√				√											
1st	Geology-2	C																
1st	English-2	C	√				√											
1st	Human Rights-2	C																
		C	√	√			√	√			√	√			√	√		

2nd	Entomology																	
2nd	plant anatomy																	
2nd	Invertebrates	C	√				√								√			
2nd	Computer-1																	
2nd	Biochemistry-1	C	√	√			√				√				√	√		
2nd	Microbiology-1																	
2nd	Classification of	C	√				√				√				√			
2nd	entomology																	
2nd	plant taxonomy																	
2nd	plant group science	C	√				√								√			
2nd	parasites																	
2nd	Computer-2	C	√	√			√				√				√			
2nd	Biochemistry-2																	
2nd	Microbiology-2	C	√				√				√				√			
2nd	English																	
3rd	Plant physiology	C	√	√			√	√			√	√			√	√		
3rd	Microbiological																	
3rd	physiology																	
3rd	Ecology	C	√	√			√	√			√	√			√	√		
3rd	Cytology																	
3rd	microscopic	C	√	√			√	√			√	√			√	√		
3rd	technique																	
3rd	Histology																	
3rd	English	C	√				√				√				√			
3rd	Genetics																	
3rd	Microbiology of soil	C	√	√			√	√			√	√			√	√		
3rd	and water																	

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

