وصف البرنامج الاكاديمى لمسار بولونيا

كلية العلوم / قسم علوم الحياة

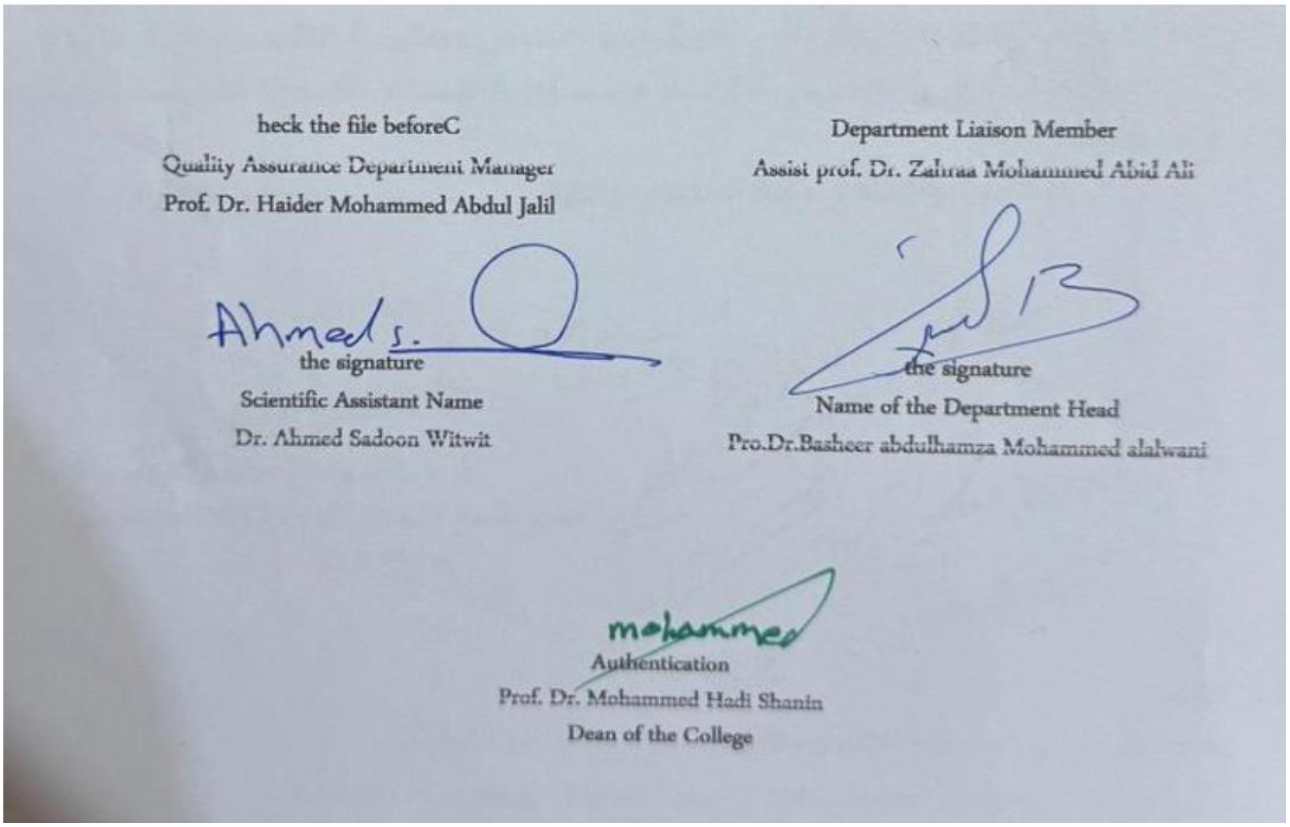
اعداد لجنة الجودة فى القسم

DESCRIPTION OF ACADEMIC PROGRAM

BIOLOGY DEPARTMENT

COLLAGE OF SCIENCE

University of Babylon	University name
College of Science	**College/Institute**
Biology Department of	**Scientific Department**
Biology Bachelor of	**Name of academic or professional program**
Biology Bachelor of	**eFinal Certificate Nam**
The first and second stages of the Bologna route Stage 3 and 4 courses	**The educational system**
2024-9-4	**Description preparation date**
2025-1 -4	**Date of filling out the file**



Introduction

in the College of Science is one of the main academic Biology The Department of alized personnel capable departments that contributes to the preparation of speci of keeping pace with modern scientific developments in various fields of biology. The academic program seeks to provide students with a solid scientific foundation in general and microbiology, through an integrated blend of . ical curricula and practical laboratory applicationstheoret

The department aims to graduate students who possess the analytical and research skills necessary to understand life phenomena at various levels, from t also seeks to enhance critical molecules and cells to organisms and ecosystems. I solving abilities, and the use of modern techniques in -thinking, problem . biological diagnosis and analysis

In addition to education, the department devotes special attention to applied and ng the community and solving environmental, basic scientific research, servi health, and agricultural problems facing the country. It also encourages scientific cooperation with local, regional, and international research centers to eloping academic ensure keeping pace with scientific developments and dev . outputs

Department's program represents a fundamental pillar for Biology Thus, the preparing generations of graduates qualified to work in educational institutions, thus ,research centers, and the health, environment, and agriculture sectors contributing to supporting sustainable development and enhancing the . university's position in the scientific community

Program vision .1
a generation that is aware and creative in understanding life and living organisms, Preparing the development of biological sciences to solve environmental, health and life contributing to .challenges

Program message .2
Providing integrated academic and research programs in life sciences that enhance a deep and scientific analysis skills, and prepare understanding of biological processes, develop research students for the job market and advanced academic fields, while adhering to ethical values and .environmental responsibility

Program objectives .3
ife sciences (cell science, Providing students with advanced knowledge in the branches of l -1 .(.genetics, molecular biology, physiology, ecology, zoology, botany, etc Develop research skills through practical training in laboratories and participation in scientific -2 .research projects solving skills using approved scientific -lemEnhance scientific analysis and prob -3 .methodologies Integrating modern technology into study and research, such as electron microscopy, -4 .molecular biology, bioinformatics, and genetic techniques in fields such as education, health, Preparing students to contribute to the labor market -5 .agriculture, pharmaceutical industries, and research centers .Encouraging innovation and scientific entrepreneurship in the fields of applied life sciences -6 dling of living organisms and Instilling ethical and professional values in research and han -7 .biotechnology Supporting environmental sustainability and biodiversity by linking education and research to -8 .environmental and societal issues

Program accreditation .4
Application submitted

Other external influences .5

.1	**economic situation** and **urity, politicalSec**
.2	**University infrastructure and services**
.3	**social and cultural impacts , Environmental, health**
.4	**Global technological influences**
.5	**International Relations and Research**

Program structure .6				
Program structure	Number of courses	Study unit	percentage	* comments
Institutional requirements	4	8	15.2%	
College requirements	3	8	12.31%	
Department requirements	47	180	75.65%	
Summer training	There is			
Other				
.Notes may include whether the course is core or optional *				

Program Description -7

year	Course code	Course name	Credit hours	
			Theoretical	Practical
1st grade				
1st semester	UOBAB0501011	General Zoology	2	2
	UOBAB0501012	Chemistry General	2	2
	UOBAB0501013	General Mathematics	2	
	UOBAB0501014	Biophysics	2	2
	UOBAB0501015	Human Rights and Democracy	2	

	UOBAB0501016	Arabic Language	2	
2nd semester	UOBAB0501021	Botany General	2	2
	UOBAB0501022	Biology Cell	2	2
	UOBAB0501023	Biostatistics	2	
	UOBAB0501024	Safety and bioscurity	2	2
	UOBAB0501025	Computer Science	2	
	UOBAB0501026	English Language	2	
2nd grade				
1st semester	UOBAB0501031	Entomology anatomy	2	2
	UOBAB0501032	Plant Anatomy	2	2
	UOBAB0501033	Microbiology 1	2	2
	UOBAB0501034	Invertebrates	2	2
	UOBAB0501035	Biochemistry 1	2	2
	UOBAB0501036	Plant Groups	2	2
2nd semester	UOBAB0501041	EntomologyTaxonomy	2	2
	UOBAB0501042	Taxonomy Plant	2	2
	UOBAB0501043	Microbiology2	2	2
	UOBAB0501044	Parasitology	2	2
	UOBAB0501045	Biochemistry2	2	2
	UOBAB0501046	English Language 2	2	2
3rd stage				
Curriculum system				
4th stage				
Curriculum system				

Expected learning outcomes of the program **8**	
knowledge	
.The student learns about the history of life sciences in various fields -A1 .oratory analysisClassify the special needs of each lab -A2 .The student separates all the tools for each analysis -A3 .The student can analyze the results of laboratory testing techniques -A4	Knowledge and understanding -A
Skills	
.iencesThe student learns about the role of life sciences with other sc -B1 The student can identify biological activities and their relationship with -B2 .different organisms results according to different statistical measure the The student can -B3 .tests between living The student is able to identify the different relationships -B4	specific -Subject -b skills

.organisms	
.Thinking skill according to the student's ability -A1 High thinking skill (the student learns to think well before making a -A2 (decision .Critical thinking skill in education -A3 .ationallyThe skill of thinking r -A4	Thinking skills -C

Teaching and learning strategies .9
Thinking strategy according to the student's ability (for example: if the student is able to -1 learn the concept of correct systems analysis, he will acquire the skill of managing and organizing . (fehis personal li
High thinking skill strategy (for example, if a student wants to make a good decision, it is -2 important to think well before making the decision. If he decides without thinking, or if he cannot ecide, this means he does not have high think well, or if he cannot decide, or perhaps will not d (thinking skill
is a term that refers to the) (Critical Thinking) Critical Thinking Strategy in Learning **-3 highest levels of thinking, which aims to pose a problem and then analyze it logically to reach) . solution the required**
brainstorming -4

Evaluation methods .10
(daily and monthly exams)Exams -1
Reports -2
DesignProjects -3
LearningFeedback -4
MoodleE-Learning using

			Faculty - 1 1				
			Faculty members				
Faculty preparation		Special skill requirements, if any	Specialization		Certificate	Instructor's name	**Academic rank**
lecturer	angel		private	The year			
	√		Microbiology	Biology	PhD	Anwar Kahdm Hussein	**professor**
	√		Plant physiology and tissue culture	Biology	PhD	Dr. Bashir Abdul Hamza Muhammad	**professor**

	√		Animal physiology	Biology	PhD	Dr. Haider Kamel Zidane	**professor**
	√		genetic engineering	Biology	PhD	Dr. Ali Hamoud diSaa-Al	**professor**
	√		immunity	Biology	PhD	Dr. Alaa Jawad Hassan	**professor**
	√		Microbiology	Biology	PhD	Dr. Azhar Imran Latif	**professor**
	√		Industerial microbiology	Biology	PhD	Dr. Iman Muhammad Jarallah	**professor**
	√		Environment and -Pollution Freshwater Environment	Biology	PhD	Jassim Mohammed Salman	**professor**
	√		Biotechnology/Enzymes	Biology	PhD	Dr. Muhammad Abdullah Jabr	**professor**
	√		Genetic engineering	Biology	PhD	D. Rabab Imran Radi	**professor**
	√		mushrooms	Biology	PhD	Moez Dr. Ibtihal Abdul Mahdi	**professor**
	√		Animal Biology Environment	Biology	PhD	Dr. Muayad Jassim Yas	**professor**
	√		immunity	Biology	PhD	Dr. Farial Jamil Abdel	**professor**
	√		Embryos	Biology	PhD	Dr. Amal Ali Mohsen	**professor**
	√		Viruses	Biology	PhD	ker Dr. Sha Hammad Muhammad	**professor**
	√		Microbiology	Biology	PhD	Dr. Wejdan Reda Mahmoud	**professor**
	√		plant cell	Biology	PhD	Dr. Rehab Eidan Kahdm	**professor**
	√		Environmental biotechnology	Biology	PhD	Dr. Ayad Mohammed Jabr	**professor**
	√		Plant classification	Biology	PhD	Nidaa Adnan Mohammed	**professor**
	√		animal cell	Biology	PhD	Dr. Maysaa Adel Hadi	**professor**
	√		animal tissues	Biology	Master's	Janan Mahdi Jawad	**professor**
	√		Reproductive	Biolo	PhD	A. Noha Ya'rab	**profess**

			ologyphysi	gy		Muhammad	**or**
	√		Plant physiology	Biolo gy	PhD	Dr. Evan Ibrahim Marhej	**profess or**
	√		Parasite immunity	Biolo gy	PhD	Dr. Qasim Abdullah Hamza	**profess or**
	√		Parasite immunity	Biolo gy	PhD	Dr. Alaa Tariq Shaker	**profess or**
	√		Antibiotic	Biolo gy	PhD	Muroog Saadi Abbas	**profess or**
	√		Molecular Biologist	Biolo gy	PhD	Dr. Hussein Aliwi Matlab	**profess or**
	√		environment	Biolo gy	PhD	Dr. Batoul Mohammed Hassan	**profess or**
	√		Micr\Microbiology obial toxins	Biolo gy	PhD	Dr. Shaima Jassim Muhammed	**profess or**
	√		Biotechnology	Biolo gy	Master	Thikra abdulali	**profess or**
	√		Biotechnology and Genetic Engineering	Biolo gy	PhD	Dr. Anwar Ali Abdullah	**profess or**
	√		Microbiology	Biolo gy	Master's	Farah Tariq Abdul Redha	**profess or**
	√		Molecular biology and biotechnology	Biolo gy	PhD	Dr. Zeina Hadi Obaid	**profess or**
	√		Environmental treatments	Biolo gy	PhD	Dr. Nuha Faleh Kahdm	**profess or**
	√		Microbiology	Biolo gy	PhD	D. Nour Salman Kazem	**profess or**
	√		Biodiversity	Biolo gy	PhD	Dr. Adi Jassim Abdul Razzaq	**profess or**
	√		hematology	Biolo gy	PhD	r. Walaa Saleh D Hassan	**profess or**
	√		medicinal plants	Biolo gy	PhD	Dr. Fadia Hamid Mohammed	**profess or**
	√		Biotechnology	Biolo gy	PhD	Dr. Mona Najah Hassan	**profess or**
	√		Microbiology	Biolo gy	PhD	Dr. Yazi Abdullah	**profess or**
	√		Microbiology	Biolo gy	PhD	Sura Ihssan Abed	**profess or**

	√		Animal tissue culture	Biology	PhD	Dr. Hala Mohi Nagi	**professor**
	√		Plant classification	Biology	PhD	Dr. Shaimaa Mohi Hassoun	**professor**
	√		Diversify my life	Biology	PhD	Dr. Wameed Kahdm Adel	**professor**
	√		mathematics	Biology	PhD	Dr. Hassanein Kassam Zidan	**assistant professor**
	√		Biotechnology	Biology	Master's	Rafel Ahmed Lilo	**assistant professor**
	√		insects	Biology	Master's	Rasha Kahdm Mahdi	**assistant professor**
	√		Environmental treatments	Biology	ster'sMa	Suad Ghali Kahdm	**assistant professor**
	√		insects	Biology	Master's	Janan Mohammed Obaid	**assistant professor**
	√		Zoology	Biology	Master's	Shaima Abdel Kahdm Hadi	**assistant professor**
	√		mentalEnviron Biology	Biology	PhD	Dr. Bassam Musa Abdul Amir	**assistant professor**
	√		Biotechnology	Biology	PhD	Dr. Zahraa Mohammed Abdel Ali	**assistant professor**
	√		Comparative anatomy	Biology	PhD	Dr. Rafala Sabiq Hussein	**assistant professor**
	√		environment	Biolo	PhD	Dr. Wathiq	**assistan**

				gy		Jassim Mohammed	**t profess or**
	√		animal behavior	Biolo gy	PhD	Dr. Hala Abdel Hadi Abdel Ghani	**assistan t profess or**
	√		Microbiology	Biolo gy	PhD	Dr. Liqa Yahya Mohsen	**assistan t profess or**
	√		medicinal plants	Biolo gy	PhD	Dr. Hanan Ahmed Hadi	**teacher**
	√		Reproductive physiology	Biolo gy	Master's	Iman Fadel Abbas	**teacher**
	√		Microbiology	Biolo gy	Master's	Mohammed Hussein Obaid	**teacher**
	√		Biotechnology	Biolo gy	Master's	Dalia Salah Mahdi	**teacher**
	√		environment	Biolo gy	Master's	Shaima Abis Hussein	**teacher**
	√		Microbiology	Biolo gy	Master's	Hawra Muhammad Reda	**teacher**
	√		Microbiology	Biolo gy	Master's	Dalal Muhammad Reda Mohsen	**teacher**
	√		mushrooms	Biolo gy	Master's	Ali Nasser Hussein	**teacher**
	√		plant anatomy	Biolo gy	Master's	Nour Mahmoud Naji	**teacher**
	√		Microbiology	Biolo gy	ster'sMa	Zahraa Ali Abdullah	**teacher**
	√		environmental pollution	Biolo gy	Master's	Hala Fayez Abdel Hadi	**teacher**
	√		Microbial environment	Biolo gy	Master's	Nour Saad Allah	**teacher**
	√		Biotechnology	Biolo gy	Master's	Yosra Abdel Hamza	**teacher**
	√		Microbiology	Biolo gy	Master's	diAnmar Mah Kahdm	**teacher**
	√		cell	Biolo gy	PhD	Dr. Farah Mumtaz	**teacher**

	√		Microbiology	Biology	PhD	Dr. Amani Abdel Nasser	**teacher**
	√		Microbiology	Biology	PhD	Dr. Iman Mubdar Nayef	**teacher**
	√		Biotechnology	Biology	PhD	Dr. Hadi Sajid Abdul Abbas	**teacher**
	√		Microbiology	Biology	Master's	Zainab Hamid Karim	**Assistant Professor**
	√		Plant physiology	Biology	Master's	Zahraa Abdel Nema Nour	**Assistant Professor**
	√		Comparative anatomy	Biology	Master's	Yasser Salam	**Assistant Professor**
	√		Animal branch	Biology	Master's	Iman Karim	**istaAssnt Professor**
	√		mushrooms	Biology	PhD	Dr. Heba Hadid Rashid	**Assistant Professor**
	√		Animal branch	Biology	Master's	Noor Rahi Jassim	**Assistant Professor**
	√		environment	Biology	Master's	Mais Mohammed Waber	**Assistant Professor**
	√		Biotechnology	Biology	Master's	Tabarak Fahri Hashim	**Assistant Professor**
	√		Animal branch	Biology	PhD	Hanna Abd Alkareem	**Assistant Professor**
	√		Biotechnology and	Biolo	PhD	Dr. Ataf Talal	**aAssist**

			genetic engineering	gy		Shaker	**nt Profess or**
	√		Biotechnology	Biolo gy	Master's	Issam Murad Youssef	**Assista nt Profess or**
	√		Animal branch	Biolo gy	Master's	Nour Mohsen Jawad	**Assista nt Profess or**
	√		Microbiology	Biolo gy	Master's	Safaa Abbas Kazem-Abdul	**Assista nt ssProfe or**
	√		Animal branch	Biolo gy	Master's	Roaa Amin Rahoumi	**Assista nt Profess or**
	√		environment	Biolo gy	Master's	Fatima Hassoun Yassin	**Assista nt Profess or**
	√		Fore\Biotechnology nsic Evidence	Biolo gy	s'Master	Ali Shaker Obaid	**Assista nt Profess or**
	√		plants	Biolo gy	Master's	Ali Rahman Shaker	**Assista nt Profess or**
	√		Microbiology	Biolo gy	Master's	Nour Abbas Jawad	**Assista nt Profess or**
	√		Calculators	Biolo gy	Master's	Maryam Ayad Jabbar	**Assista nt Profess or**
	√		Microbiology	Biolo gy	Master's	Shahd Fadel Hashem	**Assista nt Profess or**

Professional development -12
Orientation of new faculty members
- Academic guidance for new faculty members and its impact on improving university performance .
- The needs to set of new faculty members for academic and administrative guidance in higher education institutions .
- Preparing a proposal for a comprehensive orientation program for new faculty members in light of international standards for academic quality .
- The role of orientation programs in enhancing institutional belonging and motivation among new faculty members .
Professional development for faculty members
- E-training programs to develop teaching skills among faculty members .
- Workshops to develop faculty performance in light of the requirements of digital higher education .
- Improving active teaching strategies for faculty members .
- Professional development programs and their role in increasing the research production of faculty members .
- Designing a professional development program based on action research to improve academic performance .
- The relationship between professional development and scientific publishing skills in peer reviewed journals

Acceptance criteria -13
Central Admission

es of information about programsThe most important sourc -14
Textbooks -1
:Internet sources include -2
أ- books-e
ب- Scientific research

Program Development Plan
%20-Annual update of curricula by no more than 15 -1
pment and Merging, separating, limiting or adding courses in line with scientific develo -2 the labor market

Program Skills Map
Required learning outcomes of the program

stage	Course code	Course name	Essential or optional?	knowledge and understanding				specific skills-Subject				hinking skillst			
				A1	A 2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
1st stage	UOBAB0501011	General Zoology	essential	*	*				*				*		*
	UOBAB0501012	General Chemistry	essential	*		*				*		*			
	UOBAB0501013	General Mathematics	essential		*		*		*				*		*
	UOBAB0501014	Biophysics	essential		*	*			*	*		*			
	UOBAB0501015	Human Rights and Democracy	essential		*			*		*				*	
	UOBAB0501016	Arabic Language	essential	*			*		*						
	UOBAB0501021	General Botany	essential	*		*				*			*		
	UOBAB0501022	Biology Cell	essential	*	*			*			*				*
	UOBAB0501023	Biostatistics	essential	*	*				*				*		*
	UOBAB0501024	Safety and bioscurity	essential	*		*				*		*			
	UOBAB0501025	Computer Science	essential		*		*		*				*		*
	UOBAB0501026	English Language	essential		*	*			*	*		*			

stage	Course code	Course name	Essential or ?optional	knowledge and understanding				specific skills-Subject				thinking skills			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2nd stage	UOBAB0501031	Entomology anatomy	essential	*	*				*				*		*
	UOBAB0501032	Plant Anatomy	essential	*		*				*		*			
	UOBAB0501033	Microbiology 1	essential		*		*		*				*		*
	UOBAB0501034	Invertebrates	essential		*	*			*	*		*			
	UOBAB0501035	Biochemistry 1	optional		*			*		*				*	
	UOBAB0501036	Plant Groups		*			*		*						
	UOBAB0501041	EntomologyTaxonomy	optional	*		*				*			*		
	UOBAB0501042	Plant Taxonomy		*	*			*			*				*
	UOBAB0501043	Microbiology2	essential	*	*				*				*		*
	UOBAB0501044	Parasitology	essential	*		*				*		*			
	UOBAB0501045	Biochemistry2	essential		*		*		*				*		*
	UOBAB0501046	English Language 2	essential		*	*			*	*		*			

3rd stage
Curriculum system
4th stage
Curriculum system