

Undergraduate Degree Program Catalogue | 2025-2026 |

دليل البرنامج الاكاديمي



AI MUSTAQBAL UNIVERSITY

College of Sciences

(كلية العلوم – جامعة المستقبل)



Bachelor of Science (B.Sc.) – Department of biology Sciences

بكلوريوس علوم – علوم الحياة



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1. Mission & Vision Statement

Vision Statement

The Department biology Sciences seeks to provide students with the necessary knowledge and skills in the field of life sciences, enable them to think critically and creatively, and motivate them to explore and understand biodiversity and vital processes at the level of cells and ecosystems. The department is committed to providing a supportive and stimulating learning environment that encourages students to innovate, scientific research, and community participation. We seek to graduate generations of experts in the fields of life sciences, qualified to contribute to the progress of society and the advancement of the nation through research work and technological innovation.

The vision of biology Sciences Department is to achieve the highest levels of academic excellence in teaching life sciences, giving our students a deep and comprehensive understanding of biological concepts and principles. We encourage research and innovation in the areas of biological life, enabling students to acquire research skills and apply theoretical knowledge to modern challenges in life. Field of biology. The department seeks to build strong bridges with the local and industrial community and promote environmental awareness

2. Program Specification

Programm code:	BSc-Science/ Department of biology Sciences	ECTS	248
Duration:	4 levels, 8 Semesters	Method of Attendance:	Full Time

The Department biology Sciences seeks to provide students with the necessary knowledge and skills in the field of life sciences, enable them to think critically and creatively, and motivate them to explore and understand biodiversity and vital processes at the level of cells and ecosystems. The department is committed to providing a supportive and stimulating learning environment that encourages students to innovate, scientific research, and community participation. We seek to graduate generations of experts in the fields of life sciences, qualified to contribute to the progress of society and the advancement of the nation through research work and technological innovation.

3. Program Goals

4. • Providing distinct and diverse study programs in the fields of life sciences, that meet market needs and enable students to excel academically and professionally.
5. • Expanding students' scientific horizons by offering advanced and updated educational curricula that include various specializations in the life sciences.
6. • Promoting scientific research and innovation in the fields of life sciences and encouraging students to actively participate in research activities.

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7. • Enhancing interaction and communication with the local and industrial community by conducting workshops, seminars, and educational and awareness-raising events in the fields of life sciences.
 8. • Providing students with practical skills and modern techniques in the fields of microbiology, zoology, mycology, plant sciences, biotechnology, cellular genetics, and ecology.
 9. • Motivating students to think critically, innovate and develop self-research projects.
 10. • Providing ongoing academic support and counseling to students to help achieve their academic and career goals.
 11. • Encourage students to participate in student and community activities and develop leadership and team cooperation skills Mastering the skills necessary for the student to move to a stage specializing in computer and information security.

4. Academic Staff

Prof. Dr. Ali Shaalan Muailif | Ph.D. | Prof. | Lecturer. Head of Department

Jafar Hamed Jafar | M.Sc. | Asst. Lecturer. Department decision

• Maher Ali Jattan | Ph.D. | Lecturer

• Durgham Ali Abbas Kamel | Ph.D. | Lecturer

• Amir Naji Obeid | Ph.D. | Lecturer

Zainab Nazem Aziz | M.Sc. | Assistant Lecturer

• **Zahraa Jawad Kazem | M.Sc. | Assistant Lecturer**

• **Doha Salah Sahib | M.Sc. | Assistant Lecturer**

• **Ali Kameet Hamad | M.Sc. | Assistant Lecturer**

Baneen Ma'an Kareem | M.Sc. | Assistant Lecturer

5. Credits, Grading and GPA

Credits

Al-Mustaqbal University-Iraq is following the Bologna Process with the European Credit Transfer System (ECTS) credit system. The total degree program number of ECTS is 240, 30 ECTS per semester. 1 ECTS is equivalent to 25 student workload, including structured and unstructured workload.

Grading

Before the evaluation, the results are divided into two subgroups: pass and fail. Therefore, the results are independent of the students who failed a course. The grading system is defined as follows:

GRADING SCHEME مخطط الدرجات				
Group	Grade	التقدير	Marks (%)	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 - 49)	FX – Fail	مقبول بقرار	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note:

NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54). The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

Calculation of the Grade Point Average (GPA)

1. The GPA is calculated by the summation of each module score multiplied by its ECTS, all are divided by the program total ECTS.

GPA of a 4-year B.Sc. degrees:

$$\text{GPA} = [(1\text{st module score} \times \text{ECTS}) + (2\text{nd module score} \times \text{ECTS}) + \dots] / 240$$

6. Curriculum/Modules

										B	S	C									
										basic	supportive	core									
 										جمهورية العراق - وزارة التعليم العالي والبحث العلمي جامعة الموصل - كلية العلوم بكالوريوس علوم في علوم الحياة (الدورة الأولى) أربع سنوات (الثانية فصول دراسية) - 16 وحدة ائتمانية - كل وحدة ائتمانية = 3 ساعة المخطط الدراسي للعام 2021-2022											
Level	Semester	No.1	Module Code	Module Name in English	اسم الوحدة الدراسية	Language	SSWL (hr/wk)						Exam Extern			SSWL	USSWL	SWL	ECTS	Module Type	Prerequisite Module(s) Code
							CL (hr/wk)	Lect (hr/wk)	Lab (hr/wk)	Pr (hr/wk)	Tut (hr/wk)	Semr (hr/wk)	hr/sem	hr/sem	hr/sem						
One			1	UOMU0001011	General Zoology	علم الحيوان العام	English	2	2					4	64	61	125	3.00	C		
			2	UOMU0001012	Analytical Chemistry	كيمياء تحليلية	English	2		2					4	64	68	150	4.00	C	UOMU0001021
			3	UOMU0001013	General Mathematics	الرياضيات العامة	English	2	1						4	49	101	100	4.00	B	UOMU0001022
			4	UOMU0001014	Biophysics	فيزياء حيوية	English	2		2					4	64	61	125	3.00	C	
			5	UOMU0001015	Human Rights and Democracy	حقوق الانسان وديمقراطية	Arabic	2							4	34	88	100	4.00	B	
			6	UOMU0001016	Arabic Language	اللغة العربية	Arabic	2							4	34	66	100	4.00	B	
							Total	12	1	6				24	369	441	750	30			
Two			1	UOMU0001021	General Botany	علم النبات العام	English	2		2			1	8	108	91	200	5.00	C		
			2	UOMU0001022	Organic Chemistry	كيمياء عضوية	English	2		2					7	84	81	175	7.00	C	UOSAB0001012
			3	UOMU0001023	Biostatistics	إحصاء حيوي	English	2					1		4	32	93	125	5.00	B	UOSAB0001013
			4	UOMU0001024	Safety and Biosafety	السلامة وامن الأحياء	Arabic	2							2	32	93	125	5.00	B	
			5	UOMU0001025	Computer Science I	علم الحاسوب I	English	2					1		4	40	35	75	3.00	B	
			6	UOMU0001026	English Language I	اللغة الانكليزية I	English	2							3	31	17	60	2.00	B	
							Total	12	4	6	1		28	340	418	750	30				
One			1	UOMU0001031	Entomology I	علم الحشرات I	English	2	2	2				3	93	87	190	4.00	C		
			2	UOMU0001032	Plant Evolution	علم التطور النبات	Arabic	2	2	2					3	93	87	190	4.00	C	
			3	UOMU0001033	Invertebrates	علم اللافئيات	English	2	2	2					3	93	87	190	4.00	C	
			4	UOMU0001034	Mycology	علم الفطريات المجهرية I	English	2	2	2					3	93	87	190	4.00	C	
			5	UOMU0001035	Plant Growth	مناخ النبات	English	2	2	2					3	93	37	100	4.00	C	
			6	UOMU0000017	Critics of the dominant faith	الارثodoxy من وجهة النظر	Arabic	2							3	33	17	90	2.00	B	
							Total	12	8	10				18	488	262	750	30			
Two			1	UOMU0001041	Entomology II	علم الحشرات II	English	1	2	2			1	2	93	33	125	3.00	C		
			2	UOMU0001042	Plant Taxonomy	علم تصنيف النبات	Arabic	1	2	2				1	2	92	33	125	3.00	C	
			3	UOMU0001043	Biochemistry I	الكيمياء حيوية I	English	1	2	2				1	2	93	33	125	3.00	B	
			4	UOMU0001044	Microbiology I	علم الأحياء المجهرية I	English	1	2	2				1	2	92	33	125	3.00	C	
			5	UOMU0001045	Parasitology	علم الطفيليات	English	2	2	2				1	2	92	33	125	3.00	C	
			6	UOMU0000018	English Language II	اللغة الانكليزية II	English	2							2	32	18	60	2.00	B	
			7	UOMU0001047	Computer Science II	علم الحاسوب II	English	2							2	67	13	75	3.00	B	
							Total	6	14	12		5	14	194	198	750	30				
Five			1	UOSAB0001051	Cell Biology	علم خلية حيوية	English	2		2				4	64	61	125	3.00	C		
			2	UOSAB0001052	Ecology	علم البيئة	English	2		2					4	64	61	125	3.00	C	
			3	UOSAB0001053	Evolution	علم التطور	English	2		2					4	64	61	125	3.00	C	
			4	UOSAB0001054	Plant Physiology	علم فسيولوجيا النبات	English	2		2					4	64	38	100	4.00	C	
			5	UOSAB0001055	Immunology	علم المناعة	English	2		2					4	64	61	125	3.00	C	
			6	UOSAB0001056	English Language III	اللغة الانكليزية III	English	2							2	32	118	150	3.00	B	UOSAB0001046
							Total	10	8	10	0	0	0	20	252	206	750	30.00			
Six			1	UOSAB0001061	Genetics	علم الوراثة	English	2		2				4	64	61	125	3.00	C	UOSAB0001051	
			2	UOSAB0001062	Population	التحليل السكاني	English	2		2					4	64	61	125	3.00	C	UOSAB0001052
			3	UOSAB0001063	Animal Physiology	الفسيولوجيا الحيوانية	English	2		2					4	64	61	125	3.00	C	UOSAB0001053
			4	UOSAB0001064	Mycology I	علم الفطريات I	English	2		2					4	64	61	125	3.00	C	
			5	UOSAB0001065	Microbial Physiology	الفسيولوجيا الميكروبية	English	2		2					4	64	61	125	3.00	C	UOSAB0001054
			6	UOSAB0001066	Research Methodology	منهجية البحث	English	2	1						2	77	48	125	3.00	B	
							Total	10	8	10	0	0	0	22	231	233	750	30.00			
Seven			1	UOSAB0001071	Molecular Biology	علم الأحياء الجزيئي	English	2		2				4	64	61	125	3.00	C		
			2	UOSAB0001072	pathogenic Sociobiology	علم الفيزياء الاجتماعية	English	2		2					4	64	61	125	3.00	C	
			3	UOSAB0001073	Mycology II	علم الفطريات II	English	2		2					4	64	61	125	3.00	C	UOSAB0001064
			4	UOSAB0001074	Comparative Anatomy	التشريحية المقارنة	English	2		2					4	64	61	125	3.00	C	
			5	UOSAB0001075	Fossil Microbiology	علم الميكروبيولوجيا الأحفورية	English	2		2					3	63	17	100	4.00	C	
			6	UOSAB0001076	English Language IV	اللغة الانكليزية IV	English	2					2		2	62	88	150	3.00	B	UOSAB0001066
							Total	12	0	10	0	0	0	19	301	201	750	30.0			
Eight			1	UOSAB0001081	Microbial Genetics	وراثة الميكروبات	English	2		2				4	64	61	125	3.00	C	UOSAB0001071	
			2	UOSAB0001082	Mitology	علم الميكروبيولوجيا	English	2		2					4	64	61	125	3.00	C	UOSAB0001072
			3	UOSAB0001083	Industrial Microbiology	علم الميكروبيولوجيا الصناعية	English	2		2					4	64	61	125	3.00	C	UOSAB0001073
			4	UOSAB0001084	Research Project II	مشروع بحثي II	English	2		2					2	32	68	100	4.00	C	
			5	UOSAB0001085	Optional I	اختياري I	English	2		2					4	64	61	125	3.00	C	
			6	UOSAB0001086	Optional II	اختياري II	English	2		2					4	64	61	125	3.00	C	
							Total	16	0	12	0	0	0	22	352	298	750	30.0			