



Faculty of Science University of Tobruk
2024-2025

Database Of Scientific Departments Of the
Faculty Of Science, University of Tobruk

Description of the Program Mathematics

Program: Bachelor of Sciences majoring in Mathematics

1	University	Tobruck
2	Faculty	Sciences
3	Educational Program	Mathematics
4	Program Code	MA
5	Education System	8 Semesters (Rate of 4 Years)
6	Number of Accredited Units	138 Units
7	Beginning of Fall Semester	05-10-2024
8	Beginning of Spring Semester	08-02-2025

Description of the Program Mathematics

The Department of Mathematics was established as one of the first departments in the Faculty of Science in the academic year 1997. Since its establishment, its staff have taken it upon themselves to build and develop the department to keep pace with the scientific renaissance. The development of the department's curricula in various stages was one of the most prominent features of this development.

Program Vision

Excellence in preparing qualified specialists in mathematical sciences according to quality standards to meet the needs of the labor market and the requirements of society.

Program Mission

Qualifying scientifically and professionally specialized cadres in the field of mathematical sciences by providing distinguished educational programs that comply with quality standards and meet the requirements of the labor market.

Program Objectives

- 1.** Preparing qualified cadres to contribute to serving the comprehensive development and progress witnessed by the country in various areas of life by occupying specialized positions in the public and private sectors.
- 2.** The ability to support the teaching of mathematics in various educational and technical institutions.
- 3.** Providing studies and consultations in the field of mathematics to various institutions.
- 4.** Contributing to the scientific progress of mathematics through scientific research or by participating in national and international seminars and conferences.
- 5.** Enriching the Arab library by contributing to the writing of mathematics books and translating valuable international books in this field into the Arabic language.

List of courses

No.	Module Code	Module Name		Units	Theoretical Hours	Practical Hours	Tutorial Hours
		English	Arabic				
1.	MA011	General Mathematics I	الرياضيات العامة I	4	3	-	2
2.	PH011	General Physics I	الفيزياء العامة I	3	2	2	
3.	ST011	General Statistics	الإحصاء العام	3	3		1
4.	CS011	Computer Science	علم الحاسوب	3	3	-	
5.	EL011	English Language	اللغة الانجليزية	2	2	-	
6.	ARL011	Arabic Language	اللغة العربية	2	2	-	
7	MA012	General Mathematics II	الرياضيات العامة II	3	3	-	2
8	PH012	General Physics II	الفيزياء العامة II	3	2	2	
9	CH012	General Chemistry	كيمياء عامة	4	3	2	
10	ZO022	General Biology	احياء عامة	3	2	2	
11	EL012	English Language II	اللغة الإنجليزية II	2	2	-	
12	NC012	National Culture	ثقافة وطنية	2	2	-	
13	MA211	Advanced of Calculus and Analysis I	حسبان ومبادئ تحليل متقدم 1	4	3	-	2
14	MA212	Linear Algebra I	جبر خطي 1	3	3	-	-
15	MA213	Theory of Probabilities	نظرية الاحتمالات	3	2	-	2
16	MA214	Ordinary Differential Equations I	معادلات تفاضلية عادية 1	3	2	-	2
17	MA215	Fundamental of Mathematics	أسس رياضيات	3	3	-	-
18	MA215	Matlab programming	برمجة ماتلاب	3	2	-	2
19	MA221	Advanced of Calculus and Analysis 2	حسبان ومبادئ تحليل متقدم 2	4	3	-	2
20	MA222	Linear Algebra II	جبر خطي 2	3	3	-	-
21	MA223	Plane Analytic Geometry	هندسة تحليلية مستوية	3	2	-	2
22	MA224	Ordinary Differential Equations II	معادلات تفاضلية عادية 2	3	2	-	2
23	MA225	Mathematical statistic	إحصاء رياضي	3	2	-	2

No.	Module Code	Module Name		Units	Theoretical Hours	Practical Hours	Tutorial Hours
		English	Arabic				
24	MA311	Real Analysis I	تحليل حقيقي 1	3	3		-
25	MA312	Abstract Algebra I	جبر مجرد 1	3	3		-
26	MA313	Numerical Analysis I	تحليل عددي 1	3	2		2
27	MA314	Complex Analysis I	تحليل مركب 1	3	3		-
28	MA315	Methods of Mathematics I	طرق رياضية 1	3	3		-
29	MA316	Operation Research	بحوث عمليات	3	2		2
30	MA321	Real Analysis II	تحليل حقيقي 2	3	3		-
31	MA322	Abstract Algebra II	جبر مجرد 2	3	3		-
32	MA323	Numerical Analysis II	تحليل عددي 2	3	2		2
33	MA324	Complex Analysis II	تحليل مركب 2	3	3		-
34	MA325	Methods of Mathematics II	طرق رياضية 2	3	3		-
35	MA326	Dynamics	ديناميكا	3	3		-
36	MA411	Differential Geometry	هندسة تفاضلية	3	2		2
37	MA412	Topology I	توبولوجيا 1	3	3		-
38	MA413	Partial Differential Equations	معادلات تفاضلية جزئية	3	2		2
39	MA414	Functional Analysis	تحليل دالي	3	3		-
40	MA415	Theory of differential equation	نظرية المعادلات التفاضلية	3	3		-
41	MA421	Integral equations	المعادلات التكاملية	3	3		-
42	MA422	General Topology 2	التوبولوجي العام 2	3	3		-
43	MA423	Theory of numbers	نظرية الأعداد	3	2		-
44	MA424	Research Methodology and Graduation Project	طرق بحث ومشروع تخرج	3	3		-

To be admitted to a bachelor's degree in mathematics, the following conditions must be met:

1. The student must have a certificate of completion of secondary school, the scientific section.
2. The student is accepted according to the acceptance rates determined by the Ministry of Education.
3. The student must be of good conduct and behavior.
4. To be able to pursue studies in his desired specialization.
5. The faculty or one of the departments may conduct an admission exam for students applying for study.
6. Non-Libyan applicants are required to submit proof of their habitual residence in the Libyan state throughout the duration of their studies, and to abide by the laws and regulations of the faculty, and to pay the tuition fees and fees determined by the university.
7. The competent department may accept students transferring from other scientific faculties from inside or outside the Libyan state within the limits of the available capabilities and under the conditions mentioned above.
8. The student must submit all the required documents approved by the competent authorities to conduct a scientific equation by the Equivalency Committee in the competent scientific department, including:
 - a. A transcript approved by the faculty registrar, showing the subjects that the student has previously studied and passed in the faculty from which he is transferred.
 - b. A description of the previously studied courses indicating the number of study units and theoretical and laboratory hours for each course.
9. It is also required that the student spends - at least - half of the academic period (two regular academic years) before graduation, and transfer students are not accepted after conducting partial exams.
10. A letter approved by the university or faculty in which the student has previously studied, stating that no dismissal decision has been issued against him for academic or disciplinary reasons.

Student Assessment

1 – Course has (Theoretical and Practical)

Semester/Year	Evaluation Method	Percentage
Partial Exam	Written exam and oral and research papers	% 20
participate	Attendance, absence and homework	% 05
Practical exam	practical	% 15
Final Exam	Written exam	% 60
Total		100

2- Course has only Theoretical

Semester/Year	Evaluation Method	Percentage
Partial Exam	Written exam and oral and research papers	% 20
participate	Attendance, absence and homework	% 10
Final Exam	Written exam	% 70
Total		100

Tuition fees

Based on the requirements of the university

Description of the Program Geology

Program: Bachelor of Sciences majoring in Geology

1	University	Tobruck
2	Faculty	Sciences
3	Educational Program	Geology
4	Program Code	GE
5	Education System	8 Semesters (Rate of 4 Years)
6	Number of Accredited Units	130 Units
7	Beginning of Fall Semester	05-10-2024
8	Beginning of Spring Semester	08-02-2025

Program Vision

Excellence in preparing qualified specialists in Geology sciences according to quality standards to meet the needs of the labor market and the requirements of society.

Program Mission

Qualifying scientifically and professionally specialized cadres in the field of Geology sciences by providing distinguished educational programs that comply with quality standards and meet the requirements of the labor market.

Program Objectives

- Searching for energy sources; Such as petroleum, natural gas, coal and nuclear materials, and working to extract and exploit them.
- Detecting metal ores and expanding their production.
- Exploring groundwater to be an additional source of irrigation and drinking water.
- Contributing to protecting the environment and preserving it from pollution.
- Testing the suitability of selected sites for constructing giant engineering projects; Such as dams, bridges, tunnels, and buildings Huge towers and cities.
- Facilitating obtaining building and construction materials for construction and reconstruction projects in rocky mountains

List of courses

No.	Module Code	Module Name		Units	Theoretical Hours	Practical Hours	Tutorial Hours
		English	Arabic				
1.	MA011	General Mathematics I	الرياضيات العامة I	4	3		2
2.	PH011	General Physics I	الفيزياء العامة I	3	2	2	-
3.	ST011	General Statistics	الإحصاء العام	3	3	1	-
4.	CS011	Computer Science	علم الحاسوب	3	3	-	-
5.	EL011	English Language	اللغة الانجليزية	2	2	-	-
6.	ARL011	Arabic Language	اللغة العربية	2	2	-	-
7	MA012	General Mathematics II	الرياضيات العامة II	3	3		2
8	PH012	General Physics II	الفيزياء العامة II	3	2	2	-
9	CH012	General Chemistry	كيمياء عامة	4	3	2	-
10	ZO022	General Biology	احياء عامة	3	2	2	-
11	EL012	English Language II	اللغة الإنجليزية II	2	2	-	-
12	NC012	National Culture	ثقافة وطنية	2	2	-	-
13	GE211	Fundamental of geology	مبادئ علم الأرض	4	3	2	-
14	GE212	Mineralogy & Crystallography	علم المعادن والبلورات	3	2	2	-
15	GE213	Geological Maps	خرائط جيولوجية	3	3	-	-
16	GE214	Optical Mineralogy	بصريات المعادن	3	2	2	-
17	GE215	Historical Geology	جيولوجيا تاريخية	3	3	-	-
18	GE221	Environmental Geology	جيولوجيا بيئية	3	3	-	-
19	GE222	Geomorphology	علم التضاريس	3	2	2	-
20	GE223	Petrology	علم الصخور	3	2	2	-
21	GE224	Paleontology (I)	مستحاثات 1	3	2	2	-
22	GE225	Sedimentology & Sedimentary Rocks1	علم الرسوبيات والصخور الرسوبية 1	3	2	2	-

No.	Module Code	Module Name		Units	Theoretical Hours	Practical Hours	Tutorial Hours
		English	Arabic				
23	GE311	Sedimentology & Sedimentary Rocks 2	علم الرسوبيات والصخور الرسوبية 2	3	2	2	-
24	GE312	Geophysics I	جيوفيزياء 1	3	2	2	-
25	GE313	Hydrogeology I	علم الهيدرولوجيا I	3	2	2	-
26	GE314	Paleontology (II)	مستحاثات 2	3	2	2	-
27	GE315	Structural Geology &	جيولوجيا تركيبية	3	2	2	-
28	GE321	Geophysics II	جيوفيزياء 2	3	2	2	-
29	GE322	Hydrogeology II	علم الهيدرولوجيا II	3	3	-	-
30	GE323	Engineering Geology	جيولوجيا هندسية	3	2	2	-
31	GE324	Stratigraphy	علم الطبقات	3	2	2	-
32	GE325	Geochemistry	الجيوكيمياء	3	2	2	-
33	GE326	Tectonicleogy	علم تكتونية	3	2	2	-
34	GE411	Geographic Information Systems	نظم المعلومات الجغرافية	3	2	2	-
35	GE412	Field Geology	جيولوجيا الحقل	3	2	2	-
36	GE413	Petroleum Geology	جيولوجيا نفط	3	2	2	-
37	GE414	Remote sensing	استشعار عن بعد	3	2	2	-
38	GE415	Marine Geology	جيولوجيا البحار	3	2	2	-
39	GE416	Depositional Environments and Basins Analysis	بيئات ترسيب وتحليل احواض	3	2	2	-
40	GE421	Economic Geology and Mining	جيولوجيا اقتصادية وتعددين	3	2	2	-
41	GE422	Subsurface Geology	جيولوجيا تحت سطحية	3	2	2	-
42	GE423	Geology of Libya	جيولوجيا ليبيا	3	3	-	-
43	GE424	Drilling Engineering	حفر آبار	3	2	2	-
44	GE425	Graduation Project	بحث تخرج	3	3	-	-

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 - a. A transcript approved by the faculty registrar, showing the subjects that the student has previously studied and passed in the faculty from which he is transferred.
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Student Assessment

1 – Course has (Theoretical and Practical)

Semester/Year	Evaluation Method	Percentage
Partial Exam	Written exam and oral and research papers	% 20
participate	Attendance, absence and homework	% 05
Practical exam	practical	% 15
Final Exam	Written exam	% 60
Total		100

2- Course has only Theoretical

Semester/Year	Evaluation Method	Percentage
Partial Exam	Written exam and oral and research papers	% 20
participate	Attendance, absence and homework	% 10
Final Exam	Written exam	% 70
Total		100

Tuition fees

Based on the requirements of the university

Description of the Program Computer Science

Program: Bachelor of Sciences majoring in Computer Science.

1	University	Tobruk
2	Faculty	Sciences
3	Educational Program	Computer Science
4	Program Code	CS
5	Education System	8 Semesters (Rate of 4 Years)
6	Number of Accredited Units	133 Units
7	Beginning of Fall Semester	05-10-2024
8	Beginning of Spring Semester	08-02-2025

Program Vision

Achieving excellence in the fields of computer science and its applications.

Program Mission

Preparation of competent and specialized personnel in computer science and capable of creativity in the fields of education, learning, scientific research, community services and the environment.

Program Objectives

- Preparation and qualification of cadres to meet the requirements of the labor market in the field of computer science.
- To encourage and develop scientific research in the fields of computer science and to provide services to society and the environment.
- Build and develop partnership with the public, private and community sectors in all its various institutions.
- To initiate the right climate for faculty members and students and to ensure continuous development and improvement.

List of courses

No.	Module Code	Subject Name		Units	Theoretical Hours	Practical Hours	Tutorial Hours
		English	Arabic				
14	MA011	General Mathematics Language 2	الرياضيات العامة لغة برمجية 2	4	3	2	2
25	CS312	Visual Programming 2	البرمجة المرئية 2	3	2	2	-
26	CS313	Systems and Computer Analysis Design	تحليل وتصميم علم الحاسوب	3	3	=	=
27	CS314	Database Management Systems	نظم قواعد بيانات	3	2	2	-
28	CS315	Operating Systems	النظم التشغيلية	3	2	2	1
29	CS316	Multimedia Technology	وسائط متعددة	3	2	2	-
30	CS317	Computer Networks	شبكات الحاسوب	4	3	2	=
31	CS322	Software Engineering	هندسة البرمجيات	3	2	2	-
32	CS323	Information Security	أمن المعلومات	3	2	2	=
33	CS324	Computer Architecture	معمارية الحاسوب	3	2	2	-
34	MA325	Linear Algebra Methodology	الخطى الخطي	3	3	2	=
35	CS411	Image Processing	معالجة صور	4	3	2	-
36	CS413	Data Structures Discrete Structures	تركيبات البيانات	4	3	2	=
37	CS413	Database Programming	برمجة قواعد بيانات	4	3	2	-
38	CS414	Selected Topics Computer graphics	موضوعات مختارة	3	2	2	=
39	CS415	Graduation Project	بحث تخرج	3	3	-	-
40	CS421	Artificial Intelligence	ذكاء اصطناعي	4	3	2	-
20	CS223	Information Intelligence	نظم المعلومات	3	2	2	-
41	CS422	Advanced Programming	برمجة متقدمة	4	3	2	-
42	CS423	Network Security	البرمجة بلغة أمن الشبكات الحافا	4	3	2	=
43	CS415	Graduation Project	بحث تخرج	3	3	-	-
20	CS223	Programming 1	المرئية 1	3	-	-	-

To be admitted to a bachelor's degree in Computer Science, the following conditions must be met:

1. The student must have a certificate of completion of secondary school, the scientific section.
2. The student is accepted according to the acceptance rates determined by the Ministry of Education.
3. The student must be of good conduct and behavior.
4. To be able to pursue studies in his desired specialization.
5. The faculty or one of the departments may conduct an admission exam for students applying for study.
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9. It is also required that the student spends - at least - half of the academic period (two regular academic years) before graduation, and transfer students are not accepted after conducting partial exams.
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Student Assessment

1 – Course has (Theoretical and Practical)

Semester/Year	Evaluation Method	Percentage
Partial Exam	Written exam and oral and research papers	% 20
participate	Attendance, absence and homework	% 05
Practical exam	practical	% 15
Final Exam	Written exam	% 60
Total		100

2- Course has only Theoretical

Semester/Year	Evaluation Method	Percentage
Partial Exam	Written exam and oral and research papers	% 20
participate	Attendance, absence and homework	% 10
Final Exam	Written exam	% 70
Total		100

Tuition fees

Based on the requirements of the university

Description of the Program Physics

Program: Bachelor of Sciences majoring in Physics

1	University	Tobruk
2	Faculty	Sciences
3	Educational Program	Physics
4	Program Code	PH
5	Education System	8 Semesters (Rate of 4 Years)
6	Number of Accredited Units	137 Units
7	Beginning of Fall Semester	05-10-2024
8	Beginning of Spring Semester	08-02-2025

Program Vision

To provide the best forms of university education in physics and to train students and develop their scientific skills and abilities in the localization of modern technologies in the field of education and scientific research to keep pace with modern developments in technological sciences and contribute to providing appropriate solutions to the challenges of society and the environment.

Program Mission

Upgrading the educational process and providing programs that keep pace with global developments to prepare highly qualified graduates who are able to compete and contribute effectively to meeting the needs of society.

Program Objectives

- Teaching general and specialized courses in various branches of physics.
- Contribute to the provision of physics courses for all departments of the faculties of the university.
- Prepare the student in a focused preparation in the origins of physics and train him on the principles of analytical methods required for scientific extrapolation from physical experiments.
- Developing the spirit of scientific research for students and encouraging innovation.
- Preparing scientifically qualified cadres to meet the needs of the labor market in the public and private sectors.
- Preparing the application appropriately to continue his studies in graduate programs inside and outside Libya.

No.	Module Code	Module Name		Units	Theoretical Hours	Practical Hours	Tutorial Hours
		English	Arabic				

List of courses

No.	Module Code	Module Name	English	Arabic	Units	Theoretical Hours	Practical Hours	Tutorial Hours
1.	MA011	General Mathematics I	الرياضيات العامة I	الرياضيات العامة I	4	3		2
2.	PH011	General Physics I	الفيزياء العامة I	الفيزياء العامة I	3	2	2	-
3.	ST011	General Statistics	الإحصاء العام	الإحصاء العام	3	3		1
4.	CS011	Computer Science	علم الحاسوب	علم الحاسوب	3	3		-
5.	ARL011	Arabic Language	اللغة العربية	اللغة العربية	2	2		-
6.	PH311	Electromagnetic Theory I	الكهرومغناطيسية I	الكهرومغناطيسية I	2	2		-
7.	MA012	General Mathematics II	الرياضيات العامة II	الرياضيات العامة II	3	3		2
8.	PH012	General Physics II	الفيزياء العامة II	الفيزياء العامة II	3	2	2	-
9.	CH012	General Chemistry	كيمياء عامة	كيمياء عامة	4	3	2	
10.	ZO022	General Biology	احياء عامة	احياء عامة	3	2	2	-
11.	EL012	English Language II	اللغة الإنجليزية II	اللغة الإنجليزية II	2	2		-
12.	NC012	National Culture	ثقافة وطنية	ثقافة وطنية	2	2		-
13.	PH211	Classical Mechanics I	ميكانيكا كلاسيكية I	ميكانيكا كلاسيكية I	3	2	2	
14.	PH212	Vibrations and Waves	الاهتزازات والأمواج	الاهتزازات والأمواج	3	2	2	-
15.	PH213	Electricity and Magnetism I	كهربائية ومغناطيسية I	كهربائية ومغناطيسية I	2	2		-
16.	PH214	Practical Physics I	فيزياء معملية I	فيزياء معملية I	2	1	3	-
17.	MA235	Differential Equations	معادلات تفاضلية	معادلات تفاضلية	3	2	2	-
18.	MA231	Calculus & Vector Analysis	حسبان وتحليل متجهي	حسبان وتحليل متجهي	3	2		2
19.	PH211	Classical Mechanics II	ميكانيكا كلاسيكية II	ميكانيكا كلاسيكية II	3	2	2	-
20.	PH212	Thermodynamics	ديناميكا حرارية	ديناميكا حرارية	2	2		-
21.	PH213	Electricity and Magnetism II	كهربائية ومغناطيسية II	كهربائية ومغناطيسية II	2	2		-
22.	PH214	Practical Physics II	فيزياء معملية II	فيزياء معملية II	2	1	3	-
23.	MA212	Linear Algebra	جبر خطي	جبر خطي	3	2		2
24.	MA314	Complex Analysis	تحليل مركب	تحليل مركب	3	3		-

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26	PH312	Modern and Atomic Physics I	فيزياء حديثة I واذرية	3	3	-	-
27	PH313	Quantum Physics I	فيزياء الكم I	3	2	2	-
28	CS211	Programming	برمجه	3	2	2	-
29	PH314	Mathematical Physics	فيزياء رياضية	3	2	2	-
30	MA353	Numerical Analysis	تحليل عددي	3	2	2	-
31	PH315	Practical Physics III	فيزياء معملية III	2	1	3	-
32	PH311	Electromagnetic Theory II	النظرية الكهرومغناطيسية II	2	2	-	-
33	PH312	Modern and Atomic Physics II	فيزياء حديثة و II ذرية	3	3	-	-
34	PH313	Quantum Physics II	فيزياء الكم II	3	2	2	-
35	CS211	Electronics	الالكترونات	3	2	2	-
36	PH314	Plasma physics	فيزياء بلازما	3	3	-	-
37	MA353	Physical Optics	بصريات فيزيائية	3	2	2	-
38	PH315	Practical physics IV	فيزياء معملية IV	2	1	3	-
39	PH411	Statistical Physics I	فيزياء احصائية I	2	2	-	-
40	PH412	Nuclear Physics I	فيزياء نووية I	3	3	-	-
41	PH413	Laser Physics	فيزياء ليزر	2	2	-	-
42	PH414	Solid State Physics I	فيزياء الحالة I الصلبة	3	2	2	-
43	PH415	Atomic and Molecular Spectra	الاطياف الذرية والجزئية	3	3	-	-
44	PH416	Practical Physics V	فيزياء عملي V	2	1	3	-
45	PH417	Graduation Project	مشروع تخرج	3	2	2	-
46	PH421	Statistical Physics II	فيزياء احصائية II	2	2	-	-
47	PH422	Nuclear Physics II	فيزياء نووية II	3	3	-	-
48	PH423	Solid State Physics II	فيزياء الحالة II الصلبة	3	2	2	-
49	PH424	Radiation Physics	فيزياء اشعاعية	3	3	-	-
50	PH425	Practical Physics VI	فيزياء عملي VI	2	1	3	-

To be admitted to a bachelor's degree in Physics, the following conditions must be met:

1. The student must have a certificate of completion of secondary school, the scientific section.

2. The student is accepted according to the acceptance rates determined by the Ministry of Education.
3. The student must be of good conduct and behavior.
4. To be able to pursue studies in his desired specialization.
5. The faculty or one of the departments may conduct an admission exam for students applying for study.
6. Non-Libyan applicants are required to submit proof of their habitual residence in the Libyan state throughout the duration of their studies, and to abide by the laws and regulations of the faculty, and to pay the tuition fees and fees determined by the university.
7. The competent department may accept students transferring from other scientific faculties from inside or outside the Libyan state within the limits of the available capabilities and under the conditions mentioned above.
8. The student must submit all the required documents approved by the competent authorities to conduct a scientific equation by the Equivalency Committee in the competent scientific department, including:
 - a. A transcript approved by the faculty registrar, showing the subjects that the student has previously studied and passed in the faculty from which he is transferred.
 - b. A description of the previously studied courses indicating the number of study units and theoretical and laboratory hours for each course.
9. It is also required that the student spends - at least - half of the academic period (two regular academic years) before graduation, and transfer students are not accepted after conducting partial exams.
10. A letter approved by the university or faculty in which the student has previously studied, stating that no dismissal decision has been issued against him for academic or disciplinary reasons.

Student Assessment

1 – Course has (Theoretical and Practical)

Semester/Year	Evaluation Method	Percentage
Partial Exam	Written exam and oral and	% 20

	research papers	
participate	Attendance, absence and homework	% 05
Practical exam	practical	% 15
Final Exam	Written exam	% 60
Total		100

2- Course has only Theoretical

Semester/Year	Evaluation Method	Percentage
Partial Exam	Written exam and oral and research papers	% 20
participate	Attendance, absence and homework	% 10
Final Exam	Written exam	% 70
Total		100

Tuition fees

Based on the requirements of the university

Description of the Program Chemistry

Program: Bachelor of Sciences majoring in Chemistry

1	University	Tobruck
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2	Faculty	Sciences
3	Educational Program	Chemistry
4	Program Code	CH
5	Education System	8 Semesters (Rate of 4 Years)
6	Number of Accredited Units	138 Units
7	Beginning of Fall Semester	05-10-2024
8	Beginning of Spring Semester	08-02-2025

Program Vision

To be one of the leading departments in the field of chemistry at the local and international levels.

Program Mission

The mission of the department is to prepare a generation of scientific cadres trained and qualified to meet the needs of the labor market of national cadres, and work to graduate a generation of scientists and researchers. And contribute to solving the scientific and industrial problems facing the development plans in Libya, and provide technical services to the government and private sectors.

Program Objectives

- Preparing a generation of scientists and researchers in chemistry.
- Graduating national competencies to meet the needs of the state, whether teaching or the industrial sector.
- Preparing the specialized scientific competencies necessary for the development plans program.
- Conducting academic and applied scientific research.
- Contribute to the dissemination of scientific culture through scientific conferences and seminars.

List of courses

No.	Module Code	Module Name		Units	Theoretical Hours	Practical Hours	Tutorial Hours
		English	Arabic				
1.	MA011	General Mathematics I	الرياضيات العامة I	4	3	-	2
2.	PH011	General Physics I	الفيزياء العامة I	3	2	2	-
3.	ST011	General Statistics	الإحصاء العام	3	3	-	1
4.	CS011	Computer Science	علم الحاسوب	3	3	-	-
5.	EL011	English Language	اللغة الانجليزية	2	2	-	-
6.	ARL011	Arabic Language	اللغة العربية	2	2	-	-
7	MA012	General Mathematics II	الرياضيات العامة II	3	3	-	2
8	PH012	General Physics II	الفيزياء العامة II	3	2	2	-
9	CH012	General Chemistry	كيمياء عامة	4	3	2	-
10	ZO022	General Biology	احياء عامة	3	2	2	-
11	EL012	English Language II	اللغة الإنجليزية II	2	2	-	-
12	NC012	National Culture	ثقافة وطنية	2	2	-	-
13	CH211	Analytical Chemistry 1	كيمياء تحليلية 1	3	2	3	-
14	CH212	Inorganic Chemistry 1	كيمياء غير عضوية 1	3	2	3	-
15	CH213	Physical Chemistry 1	كيمياء فيزيائية 1	3	2	3	-
16	CH214	Organic Chemistry 1	كيمياء عضوية 1	3	2	3	-
17	CH215	Biochemistry 1	كيمياء حيوية 1	3	2	2	-
18	CH216	Nuclear Chemistry	كيمياء نووية	2	2	-	-
19	CH221	Analytical Chemistry 2	كيمياء تحليلية 2	3	2	3	-
20	CH222	Inorganic Chemistry 2	كيمياء غير عضوية 2	3	2	3	-
21	CH223	Physical Chemistry 2	كيمياء فيزيائية 2	3	2	3	-
22	CH224	Organic Chemistry 2	كيمياء عضوية 2	3	2	3	-
23	CH225	Biochemistry 2	كيمياء حيوية 2	3	2	3	-
24	CH226	Environmental Chemistry	كيمياء البيئة	2	2	-	-

No.	Module Code	Module Name		Units	Theoretical Hours	Practical Hours	Tutorial Hours
		English	Arabic				
25	CH311	Analytical Chemistry 3	كيمياء تحليلية 3	3	2	3	-
26	CH312	Inorganic Chemistry 3	كيمياء غير عضوية 3	3	2	3	-
27	CH313	Physical Chemistry 3	كيمياء فيزيائية 3	3	2	3	-
28	CH315	Organic Chemistry 3	كيمياء عضوية 3	3	2	3	-
29	CH315	Biochemistry 3	كيمياء حيوية 3	2	2	-	-
30	CH316	Industrial Chemistry 1	كيمياء صناعية 1	2	2	-	-
31	CH317	Quantum Chemistry	كيمياء الكم	3	3	-	-
32	CH321	Analytical Chemistry 4	كيمياء تحليلية 4	3	2	3	-
33	CH322	Inorganic Chemistry 4	كيمياء غير عضوية 4	3	2	3	-
34	CH323	Physical Chemistry 4	كيمياء فيزيائية 4	3	2	3	-
35	CH325	Organic Chemistry 4	كيمياء عضوية 4	3	2	3	-
36	CH325	Biochemistry 4	كيمياء حيوية 4	3	3	-	-
27	CH326	Industrial Chemistry 2	كيمياء صناعية 2	2	2	-	-
38	CH327	Petroleum Chemistry	كيمياء النفط	3	2	3	-
39	CH411	Analytical Chemistry 5	كيمياء تحليلية 5	3	2	3	-
40	CH412	Inorganic Chemistry 5	كيمياء غير عضوية 5	2	2	-	-
41	CH413	Physical Chemistry 5	كيمياء فيزيائية 5	2	2	-	-
42	CH414	Organic Chemistry 5	كيمياء عضوية 5	3	2	3	-
43	CH415	Chemistry of Natural Products	كيمياء نواتج طبعة	2	2	-	-
44	CH416	Graduation Project	مشروع تخرج	3	3	-	-
45	CH421	Analytical Chemistry 6	كيمياء تحليلية 6	3	2	3	-
46	CH422	Inorganic Chemistry 6	كيمياء غير عضوية 6	2	2	-	-
47	CH423	Physical Chemistry 6	كيمياء فيزيائية 6	2	2	-	-

48	CH424	Organic Chemistry 6	كيمياء عضوية 6	3	2	3	-
49	CH425	Spectroscopy	مبادئ وتطبيقات الطيف	3	3	-	-
50	CH426	Graduation Project	مشروع تخرج	3	3	-	-

To be admitted to a bachelor's degree in Chemistry, the following conditions must be met:

1. The student must have a certificate of completion of secondary school, the scientific section.
2. The student is accepted according to the acceptance rates determined by the Ministry of Education.
3. The student must be of good conduct and behavior.
4. To be able to pursue studies in his desired specialization.
5. The faculty or one of the departments may conduct an admission exam for students applying for study.
6. Non-Libyan applicants are required to submit proof of their habitual residence in the Libyan state throughout the duration of their studies, and to abide by the laws and regulations of the faculty, and to pay the tuition fees and fees determined by the university.
7. The competent department may accept students transferring from other scientific faculties from inside or outside the Libyan state within the limits of the available capabilities and under the conditions mentioned above.
8. The student must submit all the required documents approved by the competent authorities to conduct a scientific equation by the Equivalency Committee in the competent scientific department, including:
 - a. A transcript approved by the faculty registrar, showing the subjects that the student has previously studied and passed in the faculty from which he is transferred.
 - b. A description of the previously studied courses indicating the number of study units and theoretical and laboratory hours for each course.
9. It is also required that the student spends - at least - half of the academic period (two regular academic years) before graduation, and transfer students are not accepted after conducting partial exams.
10. A letter approved by the university or faculty in which the student has previously studied, stating that no dismissal decision has been issued against him for academic or disciplinary reasons.

Student Assessment

1 – Course has (Theoretical and Practical)

Semester/Year	Evaluation Method	Percentage
Partial Exam	Written exam and oral and research papers	% 20
participate	Attendance, absence and homework	% 05
Practical exam	practical	% 15
Final Exam	Written exam	% 60
Total		100

2- Course has only Theoretical

Semester/Year	Evaluation Method	Percentage
Partial Exam	Written exam and oral and research papers	% 20
participate	Attendance, absence and homework	% 10
Final Exam	Written exam	% 70
Total		100

Tuition fees

Based on the requirements of the university

Description of the Program Zoology

Program: Bachelor of Sciences majoring in Zoology

1	University	Tobruck
2	Faculty	Sciences
3	Educational Program	Zoology
4	Program Code	Zo
5	Education System	8 Semesters (Rate of 4 Years)
6	Number of Accredited Units	140 Units
7	Beginning of Fall Semester	05-10-2024
8	Beginning of Spring Semester	08-02-2025

Program Vision

The Department of Zoology seeks to occupy a prominent position on the map of university education in the field of animal sciences and to achieve high quality with international standards, and leadership in scientific research

Program Mission

The Department of Zoology seeks to provide advanced study programs in various disciplines of zoology, capable of providing the community with scientific competencies and specialized cadres trained in modern scientific techniques, and qualified to compete in the labor market and conduct various scientific research and studies to build a research base as one of the requirements for the advancement of society and the service and solution of its problems.

Program Objectives

- Preparing advanced study plans and programs in various disciplines in zoology, so that they conform to international standards and are compatible with the mission of the faculty and the university.
- Developing a culture of creativity and following advanced educational methods to obtain specialists of high levels capable of serving the community, research centers and government institutions.
- Preparing research cadres capable of following the rapid development in the various fields and disciplines of zoology.
- Continuous cooperation with advanced research centers in various fields of zoology to prepare researchers with distinguished applied thinking.
- Follow the method of continuous improvement of study programs for the permanent advancement to raise the level of graduates

List of courses

No. No.	Module Code	Module Name		Units Units	Theoretical Hours	Practical Hours	Tutorial Hours
		English	Arabic				
1.	BO011	General Botany	علم النبات العام	3	3	-	-
2.	PH011	General Physics I	الفيزياء العامة I	3	2	2	-
3.	CHT011	Chemistry	الكيمياء	4	3	2	-
4.	CS011	Computer Science	علم الحاسوب	3	3	-	-
5.	EL011	English Language	اللغة الانجليزية	2	2	-	-
6.	ARL011	Arabic Language	اللغة العربية	2	2	-	-
7	ZO022	General Zoology	علم الحيوان العام	3	3	-	
8	PH022	Medical Physics	الفيزياء الطبية	3	3	-	
9	BS022	Biostatistics	الإحصاء الحيوي	3	2	-	2
10	AR022	Arabic Language 2	اللغة العربية 2	2	2	-	
11	EL022	English Language II	اللغة الإنجليزية II	2	2	-	
12	US012	University Skills	مهارات جامعية	3	3	-	
13	ZO210	General microbiology	الأحياء الدقيقة العامة	3	2	3	-
14	ZO211	General Cytology	علم الخلية العام	3	2	2	-
15	ZO212	Invertebrates 1	اللافقاريات 1	3	2	2	-
16	CH210	Organic Chemistry	الكيمياء العضوية	3	2	2	-
17	ZO213	Histology1	علم النسيج 1	3	2	2	-
18	ZO215	Animal Ecology	بيئة الحيوان	3	2	2	-
19	ZO222	Invertebrates 2	اللافقاريات 2	3	2	2	
20	ZO224	Histology2	علم النسيج 2	3	2	2	
21	ZO225	General Entomology	الحشرات العامة	3	2	2	
22	ZO226	Animal Taxonomy	تصنيف الحيوان	3	2	2	
23	ZO223	General Marine Biology	الأحياء البحرية العام	3	2	2	
24	CH220	Biochemistry	الكيمياء الحيوية	3	2	2	

		English	Arabic				
25	ZO311	Physiology 1	علم وظائف الأعضاء 1	3	2	2	-
26	ZO312	General Genetics	الوراثة العامة	3	2	3	-
27	ZO313	Vertebrates	الحبليات	3	2	2	-
28	ZO314	Protozoology	الأوليات الحيوانية	3	2	2	-
29	CH310	Analytical Chemistry	الكيمياء التحليلية	3	2	2	-
30	ZO316	Medical Entomology	الحشرات الطبية	3	2	2	-
31	NC310	National Culture	ثقافة وطنية	2	2	-	-
32	ZO321	Physiology 2	علم وظائف الأعضاء 2	3	2	2	-
33	ZO322	Animal Behavior	سلوك الحيوان	3	2	2	-
34	ZO324	Parasitology	الطفيليات	3	2	2	-
35	ZO325	Molecular Biology	الأحياء الجزيئية	3	2	3	-
36	ZO323	Endocrinology & hormones	الغدد الصماء والهرمونات	3	2	2	-
37	ZO326	Research Methodology	طرق البحث	3	2	2	-
38	ZO411	Immunology	علم المناعة	3	2	2	-
39	ZO412	Biotechnology	التقنية الحيوية	3	2	3	-
40	ZO413	Toxicology	علم السموم	3	2	2	-
41	ZO414	Hematology	علم الدم	3	2	2	-
42	ZO415	Insect Ecology	بيئة حشرات	3	2	2	-
43	ZO400	Graduation project	مشروع تخرج	2	-	4	-
44	ZO421	Embryology	علم الأجنة	3	2	2	-
45	ZO422	Medical Bacteriology	الأحياء الدقيقة الطبية	4	3	2	-
46	ZO423	Comparative Anatomy	التشريح المقارن	4	3	2	-
47	ZO424	Environmental physiology	فسيولوجيا البيئة	3	2	2	-
48	ZO401	Graduation project	مشروع تخرج	2	-	4	-

To be admitted to a bachelor's degree in Zoology, the following conditions must be met:

1. The student must have a certificate of completion of secondary school, the scientific section.
2. The student is accepted according to the acceptance rates determined by the Ministry of Education.
3. The student must be of good conduct and behavior.
4. To be able to pursue studies in his desired specialization.
5. The faculty or one of the departments may conduct an admission exam for students applying for study.
6. Non-Libyan applicants are required to submit proof of their habitual residence in the Libyan state throughout the duration of their studies, and to abide by the laws and regulations of the faculty, and to pay the tuition fees and fees determined by the university.
7. The competent department may accept students transferring from other scientific faculties from inside or outside the Libyan state within the limits of the available capabilities and under the conditions mentioned above.
8. The student must submit all the required documents approved by the competent authorities to conduct a scientific equation by the Equivalency Committee in the competent scientific department, including:
 - a. A transcript approved by the faculty registrar, showing the subjects that the student has previously studied and passed in the faculty from which he is transferred.
 - b. A description of the previously studied courses indicating the number of study units and theoretical and laboratory hours for each course.
9. It is also required that the student spends - at least - half of the academic period (two regular academic years) before graduation, and transfer students are not accepted after conducting partial exams.
10. A letter approved by the university or faculty in which the student has previously studied, stating that no dismissal decision has been issued against him for academic or disciplinary reasons.

Student Assessment

1 – Course has (Theoretical and Practical)

Semester/Year	Evaluation Method	Percentage
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Partial Exam	Written exam and oral and research papers	% 20
participate	Attendance, absence and homework	% 05
Practical exam	practical	% 15
Final Exam	Written exam	% 60
Total		100

2- Course has only Theoretical

Semester/Year	Evaluation Method	Percentage
Partial Exam	Written exam and oral and research papers	% 20
participate	Attendance, absence and homework	% 10
Final Exam	Written exam	% 70
Total		100

Tuition fees

Based on the requirements of the university

Description of the Program Microbiology

Program: Bachelor of Sciences majoring in Microbiology

1	University	Tobruck
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2	Faculty	Sciences
3	Educational Program	Microbiology

No.	Module Code	Module Name	Units	Theoretical Hours	Practical Hours	Tutorial Hours
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4	Program Code	MB
5	Education System	8 Semesters (Rate of 4 Years)
6	Number of Accredited Units	140 Units
7	Beginning of Fall Semester	05-10-2024
8	Beginning of Spring Semester	08-02-2025

Program Vision

The Department of Microbiology seeks to occupy a prominent position on the map of university education in the field of animal sciences and to achieve high quality with international standards, and leadership in scientific research

Program Mission

The Department of Microbiology seeks to provide advanced study programs in various disciplines of zoology, capable of providing the community with scientific competencies and specialized cadres trained in modern scientific techniques, and qualified to compete in the labor market and conduct various scientific research and studies to build a research base as one of the requirements for the advancement of society and the service and solution of its problems.

Program Objectives

- Preparing advanced study plans and programs in various disciplines in zoology, so that they conform to international standards and are compatible with the mission of the faculty and the university.
- Developing a culture of creativity and following advanced educational methods to obtain specialists of high levels capable of serving the community, research centers and government institutions.
- Preparing research cadres capable of following the rapid development in the various fields and disciplines of Microbiology.
- Continuous cooperation with advanced research centers in various fields of z Microbiology to prepare researchers with distinguished applied thinking.
- Follow the method of continuous improvement of study programs for the permanent advancement to raise the level of graduates

List of courses

		English	Arabic				
1.	BO011	General Botany	علم النبات العام	3	3	-	-
2.	PH011	General Physics I	الفيزياء العامة I	3	2	2	-
3.	CHT011	Chemistry	الكيمياء	4	3	2	-
4.	CS011	Module Name		Units	Theoretical Hours	Practical Hours	Tutorial Hours
		English	Arabic	3	3		
5.	EL011	English Language	اللغة الانجليزية	2	2	-	-
6.	ARL011	Arabic Language	اللغة العربية	2	2	-	-
7.	ZO022	General Zoology	علم الحيوان العام	3	3	-	-
8.	PH022	Medical Physics	الفيزياء الطبية	3	3	-	-
9.	BS022	Biostatistics	الإحصاء الحيوي	3	2	-	2
10.	AR022	Arabic Language 2	اللغة العربية 2	2	2	-	-
11.	EL022	English Language II	اللغة الإنجليزية II	2	2	-	-
12.	US012	University Skills	مهارات جامعية	3	3	-	-
13.	MB210	General microbiology	الأحياء الدقيقة العامة	3	2	3	-
14.	MB211	General Cytology	علم الخلية العام	3	2	2	-
15.	MB212	Microbial Taxonomy	علم تصنيف الأحياء الدقيقة	3	2	2	-
16.	CH210	Organic Chemistry	الكيمياء العضوية	3	2	2	-
17.	MB213	General Ecology	البيئة العامة	3	2	2	-
18.	MB214	Microbial Ecology	بيئة الأحياء الدقيقة	3	2	2	-
19.	MB221	General Bacteriology	علم البكتيريا العام	3	2	2	-
20.	MB222	Lab. Equipment & instruments	المعدات والأدوات المعملية	3	2	2	-
21.	MB223	General Mycology	علم الفطريات العامة	3	2	2	-
22.	MB224	General Virology	علم الفيروسات العامة	3	2	2	-
23.	MB225	Microbial Growth & Physiology	نمو وفسولوجيا الميكروبات	3	2	2	-
24.	CH220	Biochemistry	الكيمياء الحيوية	3	2	3	-

25	MB311	Industrial Microbiology	الميكروبات الصناعية	3	2	2	-
26	MB312	General Genetics	الوراثة العامة	3	2	3	-
27	MB313	Soil & Air Microbiology	ميكروبات التربة والهواء	3	2	2	-
28	ZO314	Parasitic Protozoa	الأوليات الطفيلية	3	2	2	-
29	CH310	Analytical Chemistry	الكيمياء التحليلية	3	2	3	-
30	MB315	Water & Sewage Microbiology	ميكروبات الماء والصرف الصحي	3	2	2	-
31	NC310	National Culture	ثقافة وطنية	2	2	-	-
32	MB321	Microbial Genetics	الوراثة الميكروبية	2	1	2	-
33	MB322	Food Microbiology	ميكروبات الغذاء	3	2	2	-
34	ZO324	Helminthology	الديدان الطفيلية	3	2	2	-
35	MB323	Molecular Biology	الأحياء الجزيئية	3	2	3	-
36	MB324	Plant-parasitic microbes	ميكروبات النبات الطفيلية	3	2	2	-
37	MB325	Research Methodology	طرق البحث	3	2	2	-
38	ZO411	Immunology	علم المناعة	3	2	2	-
39	ZO412	Biotechnology	التقنية الحيوية	3	2	2	-
40	MB411	Medical Bacteriology	البكتريات الطبية	3	2	2	-
41	ZO414	Hematology	علم الدم	3	2	2	-
42	MB413	Microbial Toxins	السموم الميكروبية	3	2	2	-
43	MB400	Graduation project	مشروع تخرج	2	-	4	-
44	MB421	Medical Virology	الفيروسات الطبية	3	2	2	-
45	MB422	Anti-Microbial substances	المواد المضادة للميكروبات	3	2	2	-
46	MB423	Microbial Pollution & Bioremediation	التلوث الميكروبي والمعالجة البيولوجية	3	2	2	-
47	MB424	Vaccines and serology	اللقاحات والأمصال	3	2	2	-
48	MB425	Petroleum microbiology	أحياء دقيقة النفط	3	2	2	-
49	MB401	Graduation project	مشروع تخرج	2	-	4	-

To be admitted to a bachelor's degree in Microbiology, the following conditions must be met:

1. The student must have a certificate of completion of secondary school, the scientific section.

2. The student is accepted according to the acceptance rates determined by the Ministry of Education.
3. The student must be of good conduct and behavior.
4. To be able to pursue studies in his desired specialization.
5. The faculty or one of the departments may conduct an admission exam for students applying for study.
6. Non-Libyan applicants are required to submit proof of their habitual residence in the Libyan state throughout the duration of their studies, and to abide by the laws and regulations of the faculty, and to pay the tuition fees and fees determined by the university.
7. The competent department may accept students transferring from other scientific faculties from inside or outside the Libyan state within the limits of the available capabilities and under the conditions mentioned above.
8. The student must submit all the required documents approved by the competent authorities to conduct a scientific equation by the Equivalency Committee in the competent scientific department, including:
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10. A letter approved by the university or faculty in which the student has previously studied, stating that no dismissal decision has been issued against him for academic or disciplinary reasons.

Student Assessment

1 – Course has (Theoretical and Practical)

Semester/Year	Evaluation Method	Percentage
Partial Exam	Written exam and oral and	% 20

	research papers	
participate	Attendance, absence and homework	% 05
Practical exam	practical	% 15
Final Exam	Written exam	% 60
Total		100

2- Course has only Theoretical

Semester/Year	Evaluation Method	Percentage
Partial Exam	Written exam and oral and research papers	% 20
participate	Attendance, absence and homework	% 10
Final Exam	Written exam	% 70
Total		100

Tuition fees

Based on the requirements of the university

Description of the Program Botany

Program: Bachelor of Sciences majoring in Botany

1	University	Tobruck
2	Faculty	Sciences
3	Educational Program	Botany
4	Program Code	BO
5	Education System	8 Semesters (Rate of 4 Years)
6	Number of Accredited Units	130 Units
7	Beginning of Fall Semester	05-10-2024
8	Beginning of Spring Semester	08-02-2025

Program Vision

To be a leading local, regional and global department in a way that promotes a society based on knowledge, research and innovation, as well as excellence in providing educational programs in various plant sciences that enable the student to acquire competition skills in development and investment in the field of scientific research

Program Mission

The department works to provide advanced study programs in the field of botany and prepare a graduate at a distinguished level to meet the needs of the labor market and keep pace with global research developments.

Program Objectives

- Continuous work to improve the curricula and develop their vocabulary and teaching methods in line with the scientific and technical development in the field of botany.
- Scientific numbers (theoretical and practical) for graduates to enable them to play their role in the development of society as researchers in the sectors of scientific research, specialized research centers and related sectors.
- Developing scientific research programs for undergraduate students in order to contribute to the development of society.
- The Department of Botany seeks to develop a work program to form a specialized unit to provide scientific and technical consultations through the Research and Consultation Center at the university.
- The department also seeks to resume and develop its academic and research program in graduate studies.
- 6. Preparing a database for plant flora in the municipality of Tobruk, which is rich in wild plants, studying the use of them and preserving the vegetation cover in it.

List of courses

No.	Module Code	Module Name		Units	Theoretical Hours	Practical Hours	Tutorial Hours
		English	Arabic				
1.	BO011	General Botany	علم النبات العام	3	3	-	-
2.	PH011	General Physics I	الفيزياء العامة I	3	2	2	-
3.	CHT011	Chemistry	الكيمياء	4	3	2	-
4.	CS011	Computer Science	علم الحاسوب	3	3	-	-
5.	EL011	English Language	اللغة الانجليزية	2	2	-	-
6.	ARL011	Arabic Language	اللغة العربية	2	2	-	-
7	ZO022	General Zoology	علم الحيوان العام	3	3	-	-
8	PH022	Medical Physics	الفيزياء الطبية	3	3	-	-
9	BS022	Biostatistics	الإحصاء الحيوي	3	2	-	2
10	AR022	Arabic Language 2	اللغة العربية 2	2	2	-	-
11	EL022	English Language II	اللغة الإنجليزية II	2	2	-	-
12	US012	University Skills	مهارات جامعية	3	3	-	-
13	BO211	Principles of Ecology	اساسيات في علم البيئة	3	2	2	-
14	BO212	Plant Anatomy	علم تشريح النبات	3	2	2	-
15	BO213	Cytology	علم الخلية	3	2	2	-
16	BO214	Introduction to microbiology	مقدمة في علم الاحياء الدقيقة	3	2	2	-
17	CH210	Organic Chemistry	كيمياء العضويه	3	2	2	-
18	BO221	Principles of Genetics	اساسيات في علم الوراثة	3	2	2	-
19	BO222	Principles of plant taxonomy	اساسيات في علم تقسيم النبات	3	2	2	-
20	BO223	Bacteriology	علم البكتيريا	3	2	2	-
21	BO224	Physiology1	فسيولوجيا النبات 1	3	2	2	-
22	BO225	Molecular Biology	علم الاحياء الجزيئي	3	2	2	-
23	CH220	Biochemistry	الكيمياء الحيوية	3	2	2	-

No.	Module Code	Module Name		Units	Theoretical Hours	Practical Hours	Tutorial Hours
		English	Arabic				
24	BO311	Physiology2	فسيولوجيا النبات 2	3	2	2	-
25	BO312	Mycology	علم الفطريات	3	2	3	-
26	BO313	cytogenetic	الوراثة السيولوجية	3	2	2	-
27	BO314	Ecological Pollution	بيئة وتلوث	3	2	2	-
28	BO315	Medical Plant	نباتات طبية	3	2	2	-
29	Ch211	Analytical Chemistry	الكيمياء التحليلية	3	2	2	-
30	NC310	National Culture	ثقافة وطنية	2	2	-	-
31	BO321	Phycology	علم الطحالب	3	2	2	
32	BO322	Plant virology	علم الفيروسات النباتية	3	2	2	
33	BO323	Enzymology	علم الانزيمات	3	2	2	
34	BO324	Plant nutrition	تغذية النبات	3	2	3	
35	BO325	Marine Microbiology	علم الاحياء الدقيقة البحرية	3	2	2	
36	BO326	Flora of Libyan	الفلورا الليبية	3	2	2	
37	BO411	Plant communities	مجتمعات نباتية	3	2	2	
38	BO412	Plants metabolism	الايض النباتي	3	2	2	
39	BO413	Scientific writing	الكتابة العلمية	3	2	2	
40	BO414	Soil Microbiology	علم الاحياء الدقيقة في التربة	3	2	2	
41	BO415	Plant tissue culture	زراعة الانسجة النباتية	3	2	2	
42	BO416	Vegetation Analysis	التحليل الغطاء الخضري	3	2	2	
43	BO421	Biotechnology	علم امراض النبات	4	3	2	
44	BO422	Research project	علم التقنية الحيوية	3	2	2	
45	BO423	Research project	بحث التخرج	4	4	-	
46	BO424	Medical Laboratory Technology	تقنية المختبرات الطبية	4	3	2	

To be admitted to a bachelor's degree in Botany, the following conditions must be met:

1. The student must have a certificate of completion of secondary school, the scientific section.
2. The student is accepted according to the acceptance rates determined by the Ministry of Education.
3. The student must be of good conduct and behavior.
4. To be able to pursue studies in his desired specialization.
5. The faculty or one of the departments may conduct an admission exam for students applying for study.
6. Non-Libyan applicants are required to submit proof of their habitual residence in the Libyan state throughout the duration of their studies, and to abide by the laws and regulations of the faculty, and to pay the tuition fees and fees determined by the university.
7. The competent department may accept students transferring from other scientific faculties from inside or outside the Libyan state within the limits of the available capabilities and under the conditions mentioned above.
8. The student must submit all the required documents approved by the competent authorities to conduct a scientific equation by the Equivalency Committee in the competent scientific department, including:
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