Ministry of Higher Education
and Scientific Research
Apparatus of Scientific Supervision
and Evaluation
Quality Assurance and Academic
Accreditation Directorate
Accreditation Department

Description of the Academic Program and Course (Department of Sciences)

2025 – 2026

Academic Program Description Form

University Name: Al-Farabi University College – College of Education

Scientific Department: Biology Education

Name of the Academic or Professional Program: Bachelor's in Biology Education

Final Degree: Bachelor's Degree in Biology Education

Academic System: Annual

Date of Preparing the Description: 23/2026

Date of Filing: 23/2026

Signature:

Name of Scientific Assistant: Mahmood mawlood

Date: 2026/6/30

Signature:

Name of Head of Department: Mahmood mawlood

Date: 2026/6/30

The file was reviewed by the Quality Assurance and University Performance Division

Signature Prof.-dr. Hanaa Hammood

Name of the Director of the Quality Assurance and University Performance Division:

Date 20

Approval of the Dean

Mohammad Abdalqader

1. Program Vision

Raising students' level of thinking in the various fields of life sciences – scientifically, cognitively, and behaviorally – and seeking to meet the department's requirements so as to rank among the leading educational departments at the regional and Arab World levels in scientific achievement, while adopting development of performance standards to measure the academic and applied level for students of the Department of Life Sciences, in order to achieve the international accreditation standards for life-science departments in universities, in all developmental programs, with the goal of graduating a distinguished generation, scientifically and cognitively qualified, and capable of self-reliance in completing what is required of it without burdening others – while keeping pace with scientific developments and laboratory tools available worldwide. The program's vision also aspires to enhance communication in all academic, cognitive, and integrative fields, and to strengthen the curriculum structurally and rigorously, to compete in developing and preparing scientific cadres capable of development and innovation, and to be able to plan the curriculum and use advanced teaching methods, expand scientific research efforts, and apply comprehensive quality standards consistent with academic accreditation criteria, as well as to participate in serving the community through direct and continuous interaction with its institutions.

2. Program Mission

The mission of the Department of Life Sciences is to graduate qualified students who possess logical scientific thinking and research skills in the various branches of experimental life sciences, in order to supply educational institutions with competent teachers, in addition to sufficient numbers for government institutions and the other private sector. The department also seeks to provide the best modern educational laboratory techniques for undergraduate and postgraduate students, and to work on developing their skills so that they can integrate into all fields accurately and effectively, supporting the momentum of scientific research and academic interaction in order to achieve continuous communication with scientific and technical developments in Arab and foreign countries, and to meet the emerging needs of society in order to achieve comprehensive and sustainable human development, and to be able to compete locally, regionally, and internationally, and to transfer knowledge through investing in research, development, and innovation, and to strengthen the role of partnerships in research and development between universities on one hand and production and service institutions on the other.

3. Program Objectives

General Objectives:

The Department of Life Sciences aims to prepare graduate teachers of high efficiency in the field of teaching life sciences and to complete graduate studies, through:

1. Encouraging students to love their homeland and have faith in God, so that they become righteous, useful individuals in society.
2. Continuously updating teaching methods by using electronic and interactive teaching methods.
3. Providing students with substantial scientific information and a wide range of essential skills for teaching, academic work, and practical application in laboratories.
4. Achieving the specialized scientific objectives of each laboratory.
5. Cooperation and joint communication among laboratories to achieve integration in scientific research.
6. Applying international standards to raise the scientific level in laboratories and achieve scientific rigor.
7. Enabling the student to acquire the skill of education and teaching.
8. Enabling the student to benefit from knowledge and how to employ it.
9. Enabling the student to instill the principles and various guiding values among students of intermediate and preparatory schools.
10. Providing scientific information covering what is to be taught at the intermediate and preparatory levels for schools throughout Iraq, taking into account the modernization of information.

Specific Objectives

1. Striving to keep pace with modern trends in teaching methods, introducing modern educational tools, advanced technologies, and preparing high-level educational programs that utilize information and communication technologies in the process of knowledge transfer and production.
2. Preparing qualified and trained cadres to work in educational institutions.
3. Graduating qualified students to complete their postgraduate studies (Master's and PhD) in various specializations of life sciences.

4. Programmatic Accreditation

There is no program accreditation, but there is a twinning arrangement with the University of Al-Qadisiyah / College of Education / Department of Life Sciences.

5. Other External Influences

Twinning with the University of Al-Qadisiyah / College of Education / Department of Life Sciences.

6. Program Structure

Program Structure	Number of Courses	Credit Units	Percentage	Notes *
Institution Requirements	5	10	16.13%	
College Requirements	7	16	25.81%	
Department Requirements	11	32	51.61%	
Summer Training	1	4	6.45%	
Other	-	-	-	

7. Program Description

Year / Level	Course / Module Code	Course / Module Name	Credit Hours	
			Theory	Practical
First Year	101 BGB	Biology	2	2
	102 BCB	Cell Biology	2	2
	103 BPA	Plant Anatomy	2	2
	104 BGC	General Chemistry	2	1
	105 AL	Arabic Language	1	0
	106 DEP	Developmental and Educational Psychology	2	0
	107 DHR	Democracy and Human Rights	1	0
	108 COI	Computer 1	1	0
	109 BGE	Earth Science	1	0
	110 FE	Foundations of Education and Teaching	1	0
	111 EL	English Language	1	0
	112 BSS	Biological Safety and Security	1	0
	113 SE	Physical Education	0	1
	114 AE	Art Education	0	1
Second Year	215 BPT	Plant Taxonomy	2	2
	216 BEM	Embryology	2	2
	217 BIN	Invertebrates	2	2
	218 BHI	Histology	2	2
	219 BBC	Biochemistry	1	2
	220 CSB	Curriculum and School Textbook	1	2
	221 CO II	Computer 2	1	0
	222 TT	Teaching Thinking	1	0
	223 LEA	Leadership and Educational Administration	2	0
	224 AL	Arabic Language	1	0
	225 EL	English Language	1	0
	226 BRCI	The Ba'ath Crimes System in Iraq	1	0
Third Year	327 BCAC	Comparative Anatomy of Vertebrates	2	2
	328 BMY	Mycology	2	2
	329 BGE	Genetics	2	2

Course Code	Course Name	Theory	Practical
330 BAA	Algae, Lichens and Bryophytes	2	2
331 BEN	Entomology	2	2
332 BEP	Environment and Pollution	2	2
333 FSR	Foundations of Scientific Research	2	0
334 CMT	Curricula and Teaching Methods	1	2
335 ECPH	Educational Guidance and Mental Health	1	2
436 BAP	Animal Physiology	2	2
437 BPP	Plant Physiology	2	2
438 BIM	Immunology	2	2
439 BMI	Microbiology	2	2
440 BPA	Parasitology	2	2
441 BOP	Elective	2	0
442 ME	Measurement and Evaluation	2	0
443 PE	Practical Education (Teaching Practicum)	1	2
444 BRP	Research Project	0	2

Note: Course codes for years 3 and 4 are listed under "Third Year" and "Fourth Year" respectively in the original program structure.

8. Expected Learning Outcomes of the Program

Knowledge

1. Providing students with integrated scientific knowledge in the field of life sciences and its highest quality.
2. Possessing the ability to apply the scientific knowledge that students have acquired in the field of life sciences and other related sciences, ensuring cognitive communication between them and benefiting from contemporary developments.
3. Preparing highly competent cadres specialized in the field of life sciences who contribute effectively to building the knowledge society and achieving national development goals, by preparing an exemplary academic environment for developing knowledge and acquiring skills, and stimulating innovation in the same field.
4. Achieving practical engagement within governmental and private educational institutions by employing modern technologies and techniques required for practicing the teaching profession.

Skills	

1. Students must master the basic and advanced required skills to enrich their intellectual and technical knowledge in this field and its various applications.
2. Students must master the preparation of scientific research in a manner that observes an integrated scientific methodology.
3. Students must master the method of proper educational and psychological interaction within educational institutions.
4. Students must master the required skills in conducting laboratory experiments with high efficiency.
5. Students must possess the professional skills required in the field of developing life sciences, so they are able to apply them in various fields of life sciences.

Values	

1. Appreciating the greatness of the Creator, glory be to Him, in creating the human mind and making it capable of creativity in all fields of life.
2. Participation and success in their professional life through teamwork, sound ethical conduct, and effective communication among themselves.
3. Acquiring and understanding the importance of lifelong learning through professional development and practical training.
4. Valuing the efforts of scientists in developing paradigms and conveying knowledge in the field of life sciences so that it continues to advance and develop.

9. Teaching and Learning Strategies

The teaching and learning strategies and methods adopted in implementing the theoretical and practical training program for life sciences include:

1. Correct scientific thinking and discussion methods.
2. Practical tests used in scientific laboratories.
3. Teaching by means of exploratory lectures.
4. E-learning using Google Classroom platforms and the Google Meet program.
5. Practical applications.
6. Field visits.
7. Graduation research projects.
8. Seminars, training courses, and workshops evaluated by the department and the college.
9. E-learning and blended learning.

10. Evaluation Methods

1. Submitting weekly reports.
2. Quarterly and final exam grades.
3. Graduation research projects.
4. Weekly and monthly tests, including theoretical and practical exams, by assigning students drawings and illustrations specific to the practical subject matter.
5. Practical application.
6. In-person discussion sessions, as well as the use of electronic learning techniques (online).

11. Teaching Staff

Academic Rank	Specialization		Requirements / Special Skills (if any)	Number of Teaching Staff	
	General	Specific		Staff	Lecturer
Assistant Professor (PhD)	Psychology	Psychology		1	
Assistant Professor (PhD)	Earth Science			1	
Assistant Professor (PhD)	Law			1	
Assistant Lecturer	English Language	Language		1	
Assistant Lecturer	Life Sciences	Botany			1
Assistant Lecturer	Plant Protection	Entomology Taxonomy		1	
Assistant Lecturer	Chemistry	Biochemistry		1	
Assistant Lecturer	Mathematics, Sciences and Computer Applications	Applied Mathematics		1	
Assistant Lecturer	Arabic Language	Literature		1	

Orientation of New Faculty Members

1. Introducing the vision, strategic plan, and the role of the faculty member in achieving it.
2. Modern teaching methods in the field of learning (including integrating technology).
3. Introducing methods of dealing with distinguished and creative students (developing talented and gifted students).
4. Introducing performance evaluation by job function.
5. Introducing diverse e-learning methods, including uploading files and electronic exams.
6. Clarifying quality requirements, the course description, and the teaching plan.
7. Introducing teaching rights and duties.
8. Enhancing electronic communication in online classes.

Professional Development of Faculty Members

Professional development for faculty members is achieved through:

1 – Self-directed methods:

These include discussions with colleagues in the field of teaching and writing, reading, attending workshops and discussion sessions, and participating in other activities that provide opportunities for reflection on teaching and researching new teaching methods through self-teaching or peer teaching.

2 – Professional methods:

Conferences, workshops, and distance education and learning.

There are also some methods for professional development:

Professional qualification, cooperative programs among colleagues (grants), and practical training.

3. Identifying general qualifications and transferable qualifications (other relevant skills related to job placement capability and personal development).
4. Personal development through reading and updating knowledge.

12. Admission Criteria

1. Admission via the electronic portal of the (Directorate of Private University Education) affiliated with the Ministry of Higher Education and Scientific Research, according to the approved competitive ranking and annual averages system.
2. The applicant must hold a preparatory school certificate in the (Scientific or Biological) track exclusively.
3. Compliance with the minimum fees and qualifying averages for competition, as set by the Ministry for the current academic year.
4. Allowing admission and competition within the privilege channels approved by the Ministry (such as the channel for children of teaching staff, families of martyrs, or political prisoners), in accordance with the regulations in force for private education.

13. Most Important Sources of Information About the Program

The college and university website / university guide / college and department guide / books and resources in the department / internet

1. The student's preparatory graduation document issued by the Ministry of Education.
2. Central admission results (issued by the Ministry of Higher Education and Scientific Research).
3. The student's official personal documents.

14. Program Development Plan

It is proposed to establish a plan and new study programs in various specializations in light of modern global developments and the extent of need for them, and to achieve most of the objectives of university education outcomes in a manner consistent with the requirements of society and the labor market.

Curriculum Skills Map

Year / Level	Course Code	Course Name	Required / Elective	Program Learning Outcomes (1–4)				Program Skills Objectives (1b–4b)				Affective & Value-Based Objectives (1c–4c)				General & Transferable Skills (Other Skills Related to Employability) (1d–4d)			
				1	2	3	4	1b	2b	3b	4b	1c	2c	3c	4c	1d	2d	3d	4d
First Year	101 BGB	Biology	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	102 BCB	Cell Biology	Required	●	●	●	●	●	●	●	●		●	●	●	●	●		
	103 BPA	Plant Anatomy	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	104 BGC	General Chemistry	Required	●	●	●	●	●	●	●	●	●		●	●	●	●		
	105 AL	Arabic Language	Required	●	●	●	●	●	●	●		●		●	●	●			
	106 DEP	Developmental & Educational Psychology	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	107 DHR	Democracy & Human Rights	Required	●	●	●	●	●	●		●			●					
	108 COI	Computer 1	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	109 BGE	Earth Science	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	110 FE	Foundations of Education & Teaching	Required	●	●	●	●	●	●	●		●		●					
	111 EL	English Language	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	112 BSS	Biological Safety & Security	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		

Curriculum Skills Map

Year / Level	Course Code	Course Name	Required / Elective	Program Learning Outcomes (1–4)				Program Skills Objectives (1b–4b)				Affective & Value-Based Objectives (1c–4c)				General & Transferable Skills (Other Skills Related to Employability) (1d–4d)			
				1	2	3	4	1b	2b	3b	4b	1c	2c	3c	4c	1d	2d	3d	4d
Second Year	215 BPT	Plant Taxonomy	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	216 BEM	Embryology	Required	●	●	●	●	●	●	●	●		●	●	●	●	●		
	217 BIN	Invertebrates	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	218 BHI	Histology	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	219 BBC	Biochemistry	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	220 CSB	Curriculum & School Textbook	Required	●	●	●	●	●	●	●	●		●	●	●	●	●		
	221 CO II	Computer 2	Required	●	●	●	●	●	●	●	●			●	●	●	●		
	222 TT	Teaching Thinking	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	223 LEA	Leadership & Educational Administration	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	224 AL	Arabic Language	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	225 EL	English Language	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	226 BRCI	The Ba'ath Crimes System in Iraq	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		

Curriculum Skills Map

Year / Level	Course Code	Course Name	Required / Elective	Program Learning Outcomes (1–4)				Program Skills Objectives (1b–4b)				Affective & Value-Based Objectives (1c–4c)				General & Transferable Skills (Other Skills Related to Employability) (1d–4d)			
				1	2	3	4	1b	2b	3b	4b	1c	2c	3c	4c	1d	2d	3d	4d
Third Year	327 BCAC	Comparative Anatomy of Vertebrates	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	328 BMY	Mycology	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	329 BGE	Genetics	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	330 BAA	Algae, Lichens and Bryophytes	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	331 BEN	Entomology	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	332 BEP	Environment and Pollution	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	333 FSR	Foundations of Scientific Research	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	334 CMT	Curricula and Teaching Methods	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	335 ECPH	Educational Guidance and Mental Health	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		

Curriculum Skills Map

Year / Level	Course Code	Course Name	Required / Elective	Program Learning Outcomes (1–4)				Program Skills Objectives (1b–4b)				Affective & Value-Based Objectives (1c–4c)				General & Transferable Skills (Other Skills Related to Employability) (1d–4d)			
				1	2	3	4	1b	2b	3b	4b	1c	2c	3c	4c	1d	2d	3d	4d
Fourth Year	436 BAP	Animal Physiology	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	437 BPP	Plant Physiology	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	438 BIM	Immunology	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	439 BMI	Microbiology	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	440 BPA	Parasitology	Required	●	●	●	●	●	●	●	●		●		●	●	●		
	441 BOP	Elective	Elective	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	442 ME	Measurement and Evaluation	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	443 PE	Practical Education (Teaching Practicum)	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	444 BRP	Research Project	Required	●	●	●	●	●	●	●	●	●	●	●	●	●	●		

Al-Farabi University College

Course Description

Cell Biology

1.	**Course Name**	Cell Biology
2.	**Course Code**	C11
3.	**Semester / Year**	Annual / 2025–2026
4.	**Date of Preparation**	12 / 2 / 2026
5.	**Attendance Mode**	Daily attendance – Theory and Practical (Theory = Practical)
6.	**Credit Hours / Units**	4 hours (2 hours Theory + 2 hours Practical) / 6 Units total
7.	**Course Coordinator**	Assist. Lecturer Zainab Latif Abdullah zainab.latif@alfarabiuc.edu.iq Zainab.Lateef2102@sc.uobaghdad.edu.iq

8. Course Objectives

To teach first-year students in the Life Sciences Department the fundamentals and principles of cell biology and the scientific advances in this field, enabling them to teach this subject at the intermediate and preparatory school levels.

A. Cognitive Objectives (Knowledge)

• A.1 Understand the biological concepts of the plant cell.

• A.2 Understand the biological concepts of the animal cell.

• A.3 Understand behavioral scientific concepts related to the process of learning about the cell.

• A.4 Learn how to use laboratory instruments and equipment.

• A.5 Learn the use of diverse teaching methods.

• A.6 Prepare trained and qualified personnel to work in educational institutions.

• A.7 Prepare trained and qualified personnel to work in healthcare institutions.

B. Subject-Specific Skills

• B.1 Develop teaching skills in biology.

• B.2 Develop the ability to describe laboratory models and media.

• B.3 Develop the ability to link causes with natural environmental effects.

C. Assessment Methods

• C.1 Weekly report submissions.

• C.2 Daily and semester exam grades.

• C.3 Research papers in the field of cell biology.

D. General and Transferable Skills

• D.1 Apply acquired knowledge in practical contexts.

• D.2 Develop professional teaching and learning skills.

• D.3 Translate acquired knowledge into professional development.

Teaching and Learning Strategies

1. Critical thinking and discussion method.
2. Practical tests used in laboratories.
3. Exploratory lecture method.
4. E-learning (electronic quizzes and explanatory videos).

Course Structure – Weekly Schedule (30 Weeks)

Week	Hrs	Domain	Theory Topic	Practical Topic	Assessment
1	2	Knowledge	Introduction to Cell Biology	Laboratory safety precautions and guidelines	Daily quizzes + Home assignments + Monthly exams
2	2	Knowledge	Historical background of cell biology	Microscopes (The Microscopes)	Daily quizzes + Home assignments + Monthly exams
3	2	Knowledge	Prokaryotic cells	Examination using light and electron microscopy	Daily quizzes + Home assignments + Monthly exams
4	2	Knowledge	Eukaryotic cells	Preparation of temporary slides of plant cells	Daily quizzes + Home assignments + Monthly exams
5	2	Knowledge	The plasma membrane	Preparation of temporary slides of animal cells	Daily quizzes + Home assignments + Monthly exams
6	2	Knowledge	Membrane models	Preparation of permanent slides	Daily quizzes + Home assignments + Monthly exams
7	2	Knowledge	Functions of the plasma membrane	Plasma membrane (practical study)	Daily quizzes + Home assignments + Monthly exams
8	2	Knowledge	Types of transport (across membranes)	Cell wall (practical study)	Daily quizzes + Home assignments + Monthly exams
9	2	Knowledge	Endocytosis	Cell coats (practical study)	Daily quizzes + Home assignments + Monthly exams
10	2	Knowledge	Exocytosis	Cytoplasm and cell organelles (practical study)	Daily quizzes + Home assignments + Monthly exams
11	2	Knowledge	Osmosis	Plastids (practical study)	Daily quizzes + Home assignments + Monthly exams
12	2	Knowledge	Cell communication	Mitochondria (practical study)	Daily quizzes + Home assignments + Monthly exams
13	2	Knowledge	Structure of the nucleus	Chromosomes (practical study)	Daily quizzes + Home assignments + Monthly exams
14	2	Knowledge	Cell cycle and cell division	Chromosome structure and morphology	Daily quizzes + Home assignments + Monthly exams
15	2	–	Mid-Term Exam	Mid-Term Exam	Mid-Term Exam
16	2	Knowledge	Endoplasmic reticulum	Cell division (practical study)	Daily quizzes + Home assignments + Monthly exams
17	2	Knowledge	Types of endoplasmic reticulum	Mitosis (practical study)	Daily quizzes + Home assignments + Monthly exams
18	2	Knowledge	Golgi apparatus	Meiosis (practical study)	Daily quizzes + Home assignments + Monthly exams
19	2	Knowledge	Mitochondria (detailed study)	Microtome instrument	Daily quizzes + Home assignments + Monthly exams

Week	Hrs	Domain	Theory Topic	Practical Topic	Assessment
20	2	Knowledge	Lysosomes	Stains (practical study)	Daily quizzes + Home assignments + Monthly exams
21	2	Knowledge	Chromosomes (detailed study)	Types of stains	Daily quizzes + Home assignments + Monthly exams
22	2	Knowledge	Mutations	Cytoplasmic streaming (practical study)	Daily quizzes + Home assignments + Monthly exams
23	2	Knowledge	Chromosomal abnormalities	Plasmolysis in plant cells and osmotic pressure	Daily quizzes + Home assignments + Monthly exams
24	2	Knowledge	DNA structure	Study of plasma membrane permeability	Daily quizzes + Home assignments + Monthly exams
25	2	Knowledge	Protein synthesis	Distinguishing between living and dead cells	Daily quizzes + Home assignments + Monthly exams
26	2	Knowledge	Microtubules	Detection of non-living components (starch grains and crystals)	Daily quizzes + Home assignments + Monthly exams
27	2	Knowledge	Apoptosis (programmed cell death)	Fractionation of plant cells	Daily quizzes + Home assignments + Monthly exams
28	2	Knowledge	Mutations at the cellular level	Fractionation of animal cells	Daily quizzes + Home assignments + Monthly exams
29	2	Knowledge	Cancer cells	Methods of cell preservation	Daily quizzes + Home assignments + Monthly exams
30	2	–	Preparatory Week before the Final Exam	Revision / Final Exam Preparation	Revision

9. Course Assessment

The grade is distributed out of 100 based on assigned tasks including: daily preparation, daily quizzes, oral exams, monthly tests, written exams, reports, etc.

1. Daily exams with practical and scientific questions.
2. Participation grades for competitive questions among students.
3. Grades for environmental assignments and assigned reports.
4. Semester exams covering the full curriculum.

10. Learning and Teaching Resources

Type	Reference
Required Texts	• Cell Biology — authored by Najah Shammo Oraha, Hanaa Fadel Khalil, and Layla Abd al-Wahhab al-Sheikh. • The World of the Cell — Wayne M. Becker, 2000.
Recommended Texts	Cell Biology — authored by Najah Shammo Oraha, Hanaa Fadel Khalil, and Layla Abd al-Wahhab al-Sheikh.
Additional References	None specified
Websites / E-learning	• https://classroom.google.com/c/jA5MDI2Mzc4Njkw?cjc=k5oqkem • https://meet.google.com/lookup/a3z3meqqg5

Course Development Plan

Some curricula require adjustments to align with local and regional developments in cell biology. This includes staying current with the latest advances in teaching methods and modern technologies, and adding updated references.

Course Instructor: Assist. Lecturer Zainab Latif Abdullah

Al-Farabi University College

Course Description

General Biology

1.	**Course Name**	General Biology
2.	**Course Code**	■ ■ 101
3.	**Semester / Year**	Annual / 2025–2026
4.	**Date of Preparation**	2026
5.	**Attendance Mode**	Theory and Practical (Theory = Practical)
6.	**Credit Hours / Units**	4 hours (2 Theory + 2 Practical) / 6 Units
7.	**Course Coordinator**	Assist. Dr. Heyad Jouma Hameed heyadjouma59@gmail.com

8. Course Objectives

• Prepare students to understand biology, its development, and its branches, while highlighting the importance of studying biology and understanding the evolution of living organisms over time.

• Address the principles of classifying living organisms and study evolutionary theories through the evolutionary ladder at its various stages, evaluating the validity of these theories.

• Provide students with fundamental knowledge of biological principles and enable them to apply this knowledge in teaching and educational practice.

• Study all aspects of animals and plants — including cellular structure, functions, and related topics in zoology and botany.

Teaching and Learning Strategies

1. Lecture method supported by Data Show (PowerPoint) presentations.

2. Discussion method.

Course Structure – Weekly Schedule

Week	Hours	Learning Outcomes	Unit / Topic	Teaching Method	Assessment
1	2	Define biology and its importance	Introduction to Biology (general guidelines for lab safety and professional conduct)	PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
2	2	Understand microscopes	The Microscope: structure, types, and examination methods	PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
3	2	Identify eukaryotic cells	Eukaryotic Cells: structure, sizes, shapes, and differences from prokaryotic cells	PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
4	2	Distinguish cell types	Animal Cell vs. Plant Cell: structure and differences	PPT Lectures (Theory)	Daily quizzes + Home assignments + Monthly exams

Week	Hours	Learning Outcomes	Unit / Topic	Teaching Method	Assessment
5	2	Identify cell types	Types of Cells (Types of mouth parts)	PPT Lectures (Theory)	Daily quizzes + Home assignments + Monthly exams
6	2	Understand cell division	Cell Division	PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
7	2	Understand histology	Histology: Simple Epithelial Tissue	PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
8	2	Mid-term Exam	Mid-Term Exam	–	Mid-Term Exam
9	2	Understand epithelial tissue	Stratified Epithelial Tissue	PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
10	2	Understand connective tissue	Connective Tissues	PPT Lectures (Theory)	Daily quizzes + Home assignments + Monthly exams
11	2	Understand specialized tissues	Specialized Tissues: Cartilage and Bone	PPT Lectures (Theory)	Daily quizzes + Home assignments + Monthly exams
12	2	Understand blood and lymph	Blood and Lymph Tissue	PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
13	2	Insect anatomy	Dissection of an Insect Model	PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
14	2	Frog anatomy	Dissection of a Frog	PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
15	2	Identify internal organs	Identification of the Internal Organs of a Frog	PPT Lectures (Theory)	Daily quizzes + Home assignments + Monthly exams
16	2	Exam preparation	Preparatory Week before the Final Exam	–	Revision

9. Course Assessment

The grade is distributed out of 100 based on assigned tasks. Distribution includes:

1. Daily exams with practical and scientific questions.
2. Participation grades for competitive questions among students.
3. Grades for environmental assignments and assigned reports.
4. Semester exams covering the full curriculum.

10. Learning and Teaching Resources

Type	Reference
Required Textbooks	• Biology: Part One for First-Year University Students — Authored by a committee from the Ministry of Higher Education and Scientific Research, 2006. • Biology: Part Two for First-Year University Students.
Main References	General Biology — Part One Al-Rushd Library Author: Lamia Mahmoud Morsy | Publisher: Dar Al-Ilm wal-Iman / Dar Al-Jadeed Edition: 1st | Year: 2021
Supplementary References (journals, reports, etc.)	General Biology — Renato Dela Peña Jr. Edition: 1st | Publisher: JFS Publishing Services ISBN: 978-621-415-013-7 | Year: June 2018
Electronic References / Websites	General Biology (Open Textbook) https://open.umn.edu/opentextbooks/textbooks/349

Course Instructor: Assist. Dr. Heyad Jouma Hameed

Al-Farabi University College

Course Description

Plant Anatomy

1.	**Course Name**	Plant Anatomy
2.	**Course Code**	BPA103
3.	**Semester / Year**	Annual / 2025–2026
4.	**Date of Preparation**	12 / 2 / 2026
5.	**Attendance Mode**	Daily attendance – Theory and Practical (Theory = Practical)
6.	**Credit Hours / Units**	4 hours (2 hours Theory + 2 hours Practical) / 6 Units total
7.	**Course Coordinator**	Assist. Lecturer Zainab Latif Abdullah zainab.latif@alfarabiuc.edu.iq Zainab.Lateef2102@sc.uobaghdad.edu.iq

8. Course Objectives

This course aims to study the internal structure of plants through anatomical cross-sections of their various parts (root, stem, and leaves), the anatomical structure of the plant cell, and different tissue types, in addition to understanding the effect of the environment on plant anatomical structure.

A. Knowledge and Understanding (Cognitive Objectives)

• A.1 Recognize key terminology related to plant anatomy.

• A.2 Understand the importance of plant anatomy as a science.

• A.3 Identify the types of plant tissues.

• A.4 Describe plant tissues, cells, and their living and non-living components.

• A.5 Understand the functions of plant cells and organs.

• A.6 Identify the types of growth in plants.

• A.7 Identify the types of plant organs and their modifications according to different environments.

B. Subject-Specific Skills

• B.1 Conduct anatomical comparisons between different plant organs; study seed structure and germination; study anatomical differences in organ characteristics (root, stem, leaves).

• B.2 Determine the type of environment a plant inhabits through its modifications and internal structure (aquatic, dry/xeric, and mesophytic environments).

• B.3 Distinguish between types of plant cells.

• B.4 Develop teaching skills in plant anatomy.

• B.5 Describe laboratory models and media.

• B.6 Develop the ability to link causes with natural effects.

C. Thinking Skills

• C.1 Engage in dialogue between students and instructor.

• C.2 Prepare weekly reports.

• C.3 Conduct discussions of results.

• C.4 Exploratory thinking: discovering scientific facts through laboratory experiments.

D. General and Transferable Skills

• D.1 Apply acquired knowledge in practice.

• D.2 Develop professional teaching and learning skills.

• D.3 Translate acquired skills into professional development.

Teaching and Learning Strategies

1. Critical thinking and discussion method.
2. Practical tests used in laboratories.
3. Exploratory lecture method.
4. E-learning (electronic quizzes and explanatory videos).

Assessment Methods:

1. Weekly report submissions.
2. Exam grades.
3. Discussions and grades.

Course Structure – Weekly Schedule (30 Weeks)

Week	Hrs	Learning Domain	Unit / Topic	Teaching Method	Assessment
1	2	Knowledge	Introduction to Plant Anatomy: concept of plant anatomy and its relationship to other sciences [Practical: Cell Wall study – wall formation and layers]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
2	2	Knowledge	Introduction to Plant Anatomy: development of the plant body and the concept of the plant cell [Practical: Cell Wall – chemical composition, crystalline properties of cellulose fibrils]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
3	2	Knowledge	Cell Wall: how the wall is formed and its layers [Practical: Cell Wall – formation methods and layers]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
4	2	Knowledge	Cell Wall: chemical composition, crystalline properties of cellulose fibrils in the cell wall [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
5	2	Knowledge	Cell Wall Appendages: living structures within the cell wall, including pits [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
6	2	Knowledge	Cell Wall Appendages: living structures within the cell wall, including primary pit fields [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
7	2	Knowledge	Cell Wall Appendages: living structures within the cell wall, including plasmodesmata [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams

Week	Hrs	Learning Domain	Unit / Topic	Teaching Method	Assessment
8	2	Knowledge	Cell Wall Appendages: living structures within the cell wall, including intercellular spaces [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
9	2	Knowledge	Protoplast: concept of the protoplast and its living components [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
10	2	Knowledge	Protoplast: concept of the protoplast and its non-living components [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
11	2	Knowledge	Meristematic Tissues: classification, cell differentiation, including apical meristems [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
12	2	Knowledge	Meristematic Tissues: theories of apical meristem growth in stem and root [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
13	2	Knowledge	Lateral Meristems: lateral meristematic tissues and types – vascular cambium [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
14	2	Knowledge	Lateral Meristems: lateral meristematic tissues and types – cork cambium (phellogen) [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
15	2	Mid-Term Exam	Mid-Term Exam	–	Mid-Term Exam
16	2	Knowledge	Permanent Tissues: types of permanent tissues in plants – protective tissues including epidermis and periderm [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
17	2	Knowledge	Epidermal Appendages: stomatal complexes and their formation [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
18	2	Knowledge	Epidermal Appendages: trichomes (hairs), their types and origin [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
19	2	Knowledge	Ground Tissues: parenchyma tissue [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
20	2	Knowledge	Ground Tissues: collenchyma tissue [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams

Week	Hrs	Learning Domain	Unit / Topic	Teaching Method	Assessment
21	2	Knowledge	Ground Tissues: sclerenchyma tissue [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
22	2	Knowledge	Vascular Tissues: primary xylem tissue [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
23	2	Knowledge	Vascular Tissues: primary phloem tissue [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
24	2	Knowledge	Vascular Tissues: secondary xylem tissue [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
25	2	Knowledge	Vascular Tissues: secondary phloem tissue [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
26	2	Knowledge	Vascular Tissues: how secondary growth occurs [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
27	2	Knowledge	Types of vascular bundles in different plants [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
28	2	Knowledge	Anatomical structure of the root [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
29	2	Knowledge	Anatomical structure of the stem and leaves [Practical: same topic]	Blackboard & projector E-learning platform PPT Lectures (Theory + Practical)	Daily quizzes + Home assignments + Monthly exams
30	2	–	Preparatory Week before the Final Exam	–	Revision

9. Course Assessment

The grade is distributed out of 100 based on assigned tasks including: daily preparation, daily quizzes, oral exams, monthly tests, written exams, reports, etc.

1. Daily exams with practical and scientific questions.
2. Participation grades for competitive questions among students.
3. Grades for environmental assignments and assigned reports.
4. Semester exams covering the full curriculum.

10. Learning and Teaching Resources

Type	Reference
Required Texts	1. Lectures in General Botany — prepared by department faculty members. 2. Practical Sessions in General Botany — prepared by department faculty members. 3. Fundamentals of Plant Anatomy, 3rd Edition (1988) — Al-Ani, Badri Uwaid & Saleh, Qaisar Najeeb.
Recommended Texts	Fundamentals of Plant Anatomy, 3rd Edition (1988) — Al-Ani, Badri Uwaid & Saleh, Qaisar Najeeb.
Websites	1. https://portal.arid.my/ar-LY/Posts/Details/02e31e14-263b-4033-907e-6bd9e57dd8a9 2. http://universityofladakh.org.in/file1/Botany%20Sem%203b.pdf 3. https://ncert.nic.in/textbook/pdf/kebo106.pdf

Course Instructor: Assist. Lecturer Zainab Latif Abdullah

Al-Farabi University College

Course Description

1.	**Course Name**	General Chemistry Lab (Analytical Chemistry – Organic Chemistry)
2.	**Course Code**	BGC104
3.	**Semester / Year**	2025 – 2026
4.	**Date of Preparation**	12-2-2026
5.	**Attendance Mode**	Daily attendance
6.	**Credit Hours / Units**	2 hours per week / 4 units total
7.	**Course Coordinator**	Assist. Lecturer Mariem Lateef Abdullah mariem.lateef@alfarabiuc.edu.iq

8. Course Objectives

• Learn the names and purposes of instruments and equipment used in the general chemistry laboratory.

• Develop basic laboratory skills: handling chemical substances, operating instruments, and writing reports.

• Learn fundamental techniques in analytical chemistry.

• Learn methods for preparing solid and liquid materials at controlled concentrations.

• Learn titration methods, types of reactions in titration, and instruments used.

• Learn fundamental techniques in organic chemistry, including purification and separation methods.

• Study certain organic compounds: preparation methods, properties, and identification.

Module Learning Outcomes

1. Acquire laboratory skills in organic and analytical chemistry.
2. Identify physical and chemical properties of substances and prepare solutions.
3. Understand types of chemical solutions and how to calculate their concentrations.

Strategies

1. Students identify scientific concepts related to organic compounds.
2. Students identify scientific concepts related to physical and chemical properties of materials.
3. Students identify scientific concepts related to solution preparation.

Weekly Schedule

Week	Hours	Topic	Learning Domain	Teaching Method	Assessment
1	2	Laboratory equipment and their uses	Knowledge	Blackboard & projector Google Classroom e-learning platform Practical lab experiments	Daily quiz & oral questions
2	2	Crystallization	Knowledge	Blackboard & projector Google Classroom e-learning platform Practical lab experiments	Daily quiz & oral questions

Week	Hours	Topic	Learning Domain	Teaching Method	Assessment
3	2	Melting Point	Knowledge	Blackboard & projector Google Classroom e-learning platform Practical lab experiments	Daily quiz & oral questions
4	2	Boiling Point	Knowledge	Blackboard & projector Google Classroom e-learning platform Practical lab experiments	Daily quiz & oral questions
5	2	Distillation	Knowledge	Blackboard & projector Google Classroom e-learning platform Practical lab experiments	Daily quiz & oral questions
6	–	Mid-term Exam	–	–	Exam
7	2	Extraction	Knowledge	Blackboard & projector Google Classroom e-learning platform Practical lab experiments	Daily quiz & oral questions
8	2	Preparation of Aspirin	Knowledge	Blackboard & projector Google Classroom e-learning platform Practical lab experiments	Daily quiz & oral questions
9	2	Preparation of Salicylic Acid from Aspirin	Knowledge	Blackboard & projector Google Classroom e-learning platform Practical lab experiments	Daily quiz & oral questions
10	2	Detection of Alcohols, Aldehydes, and Ketones	Knowledge	Blackboard & projector Google Classroom e-learning platform Practical lab experiments	Daily quiz & oral questions
11	–	End-of-Semester Exam	–	–	Exam
12	2	Analytical Chemistry: branches and concentration expression methods	Knowledge	Blackboard & projector Google Classroom e-learning platform Practical lab experiments	Daily quiz & oral questions
13	2	Preparation of solutions from solids and liquids	Knowledge	Blackboard & projector Google Classroom e-learning platform Practical lab experiments	Daily quiz & oral questions
14	2	Preparation of 0.1 N HCl solution and standardization with Na■CO■	Knowledge	Blackboard & projector Google Classroom e-learning platform Practical lab experiments	Daily quiz & oral questions
15	2	Preparation of 0.1 N NaOH solution and standardization with HCl	Knowledge	Blackboard & projector Google Classroom e-learning platform Practical lab experiments	Daily quiz & oral questions
16	2	Determination of Water Hardness	Knowledge	Blackboard & projector Google Classroom e-learning platform Practical lab experiments	Daily quiz & oral questions
17	2	Determination of Vinegar Quality	Knowledge	Blackboard & projector Google Classroom e-learning platform Practical lab experiments	Daily quiz & oral questions
18	–	Final Exam	–	–	Exam

9. Course Assessment

The grade is distributed out of 100 based on assigned tasks, including: daily preparation, daily quizzes, oral exams, monthly tests, written exams, lab reports, etc.

10. Learning and Teaching Resources

Type	Reference
Required Text (Organic Chemistry)	Organic Chemistry (course textbook)
Recommended Text (Analytical Chemistry)	Skoog D.A., West D.M., Holler F.J. and Crouch S.R. (2013). Fundamentals of Analytical Chemistry. Nelson Education.
Required Text (Advanced Organic Chemistry)	March's Advanced Organic Chemistry: Reactions, Mechanisms, and Structure, 6th Edition, 2007. p. 2,377.
Websites	No specific websites listed

Course Instructor: Assist. Lecturer Mariem Lateef Abdullah

Al-Farabi University College

Course Description

1.	**Course Name**	General Chemistry – Theoretical (Analytical Chemistry & Organic Chemistry)
2.	**Course Code**	BGC104
3.	**Semester / Year**	2025 – 2026
4.	**Date of Preparation**	12 / 2 / 2026
5.	**Attendance Mode**	Daily attendance
6.	**Credit Hours / Units**	2 hours Theoretical / 2 hours Practical / 4 Units total
7.	**Course Coordinator**	Assist. Lecturer Mariem Lateef Abdullah mariem.lateef@alfarabiuc.edu.iq

8. Course Objectives

• Introduce students to the fundamentals of general chemistry.

• Provide an introduction to analytical chemistry and organic chemistry.

Module Learning Outcomes

Knowledge

Strategies

1. Students identify scientific concepts related to organic chemistry.

2. Students identify scientific concepts related to analytical chemistry.

3. Students identify behavioral scientific concepts related to learning organic compounds, understanding their importance, and their role in human life.

Weekly Schedule

Week	Hours	Topic	Learning Domain	Teaching Method
1	2	Introduction to Chemistry, Analytical Chemistry: definition, branches, uses, and importance of each	Knowledge	Blackboard & projector Google Classroom e-learning platform
2	2	Types of chemical reactions occurring in titration; introduction to gravimetric analysis	Knowledge	Blackboard & projector Google Classroom e-learning platform
3	2	Gravimetric analysis methods: types of precipitates and weighing methods	Knowledge	Blackboard & projector Google Classroom e-learning platform
4	2	Methods of expressing concentration: Molarity – Normality, plus methods for calculating molar mass of compounds; problem set	Knowledge	Blackboard & projector Google Classroom e-learning platform
5	2	Methods of expressing concentration: Formality – Molality – Molar fraction, with problem set	Knowledge	Blackboard & projector Google Classroom e-learning platform
6	–	Mid-term Exam	–	Blackboard & projector Google Classroom e-learning platform

Week	Hours	Topic	Learning Domain	Teaching Method
7	2	Methods of expressing concentration: Percentage (w/w, v/v, w/v) – Parts per thousand – Parts per million – Parts per billion, with problem set	Knowledge	Blackboard & projector Google Classroom e-learning platform
8	2	Laws used to calculate concentrations of liquid solutions; problem set	Knowledge	Blackboard & projector Google Classroom e-learning platform
9	2	Methods of calculating the dilution factor, with examples	Knowledge	Blackboard & projector Google Classroom e-learning platform
10	2	Introduction to chemical equilibrium	Knowledge	Blackboard & projector Google Classroom e-learning platform
11	–	End-of-Semester Exam	–	Blackboard & projector Google Classroom e-learning platform
12	2	Types of equilibrium constants (Kw for water, Ksp for sparingly soluble salts, Ka for strong/weak acids, Kb for strong/weak bases), with examples	Knowledge	Blackboard & projector Google Classroom e-learning platform
13	2	Calculating pH for acid, base, and salt solutions, with examples	Knowledge	Blackboard & projector Google Classroom e-learning platform
14	2	Buffer solutions: types and methods of calculating pH for each type, with varied problems	Knowledge	Blackboard & projector Google Classroom e-learning platform
15	2	Calculating pH for acid-base titration indicators, with problems	Knowledge	Blackboard & projector Google Classroom e-learning platform
16	2	Statistical analysis of data, with problem set	Knowledge	Blackboard & projector Google Classroom e-learning platform
17	2	Introduction to Organic Chemistry: importance, role in life, and key organic compounds	Knowledge	Blackboard & projector Google Classroom e-learning platform
18	2	Electron distribution in shells, electronic hybridization and its types, nature of chemical bonds	Knowledge	Blackboard & projector Google Classroom e-learning platform
19	2	Types of chemical reactions; classification of organic compounds and types of functional groups	Knowledge	Blackboard & projector Google Classroom e-learning platform
20	2	Definition of aliphatic and aromatic hydrocarbons and their classification	Knowledge	Blackboard & projector Google Classroom e-learning platform
21	2	Alkanes: nomenclature, nature of substituent groups, physical properties	Knowledge	Blackboard & projector Google Classroom e-learning platform
22	2	Alkyl radicals and classification of hydrogen atoms	Knowledge	Blackboard & projector Google Classroom e-learning platform
23	2	Preparation of alkanes, their molecular similarities, and reactions	Knowledge	Blackboard & projector Google Classroom e-learning platform
24	2	Cycloalkanes	Knowledge	Blackboard & projector Google Classroom e-learning platform
25	2	Alkenes: nomenclature, geometric molecular similarities, stability of alkenes	Knowledge	Blackboard & projector Google Classroom e-learning platform
26	2	Physical properties of alkenes, preparation methods, key reactions, and detection of double bonds	Knowledge	Blackboard & projector Google Classroom e-learning platform
27	2	Alkynes: nomenclature, physical and chemical properties	Knowledge	Blackboard & projector Google Classroom e-learning platform
28	2	Methods of preparing alkynes	Knowledge	Blackboard & projector Google Classroom e-learning platform

Week	Hours	Topic	Learning Domain	Teaching Method
29	2	Reactions of alkynes and detection of triple bonds	Knowledge	Blackboard & projector Google Classroom e-learning platform

9. Course Assessment

The grade is distributed out of 100 based on assigned tasks including: daily preparation, daily quizzes, oral exams, monthly tests, written exams, reports, etc.

10. Learning and Teaching Resources

Type	Reference
Required Texts	Organic Chemistry (course textbook) Analytical Chemistry (course textbook)
Recommended Texts	• Skoog D.A., West D.M., Holler F.J. and Crouch S.R. (2013). Fundamentals of Analytical Chemistry. Nelson Education. • Miller J.M. and Miller J.C. (2005). Statistics and Chemometrics for Analytical Chemistry, 5th Ed. Pearson Education Limited, London.
Additional Reference	Bluman A.G. (1997). Elementary Statistics, 3rd Ed. WCB/McGraw-Hill, New York.
Websites	No specific websites listed

Course Instructor: Assist. Lecturer Mariem Lateef Abdullah

Al-Farabi University College

Course Description

Foundations of Education

1.	**Course Name**	Foundations of Education
2.	**Course Code**	Foundations of Education
3.	**Semester / Year**	Annual
4.	**Date of Preparation**	1 / 10 / 2025
5.	**Attendance Mode**	Daily attendance
6.	**Credit Hours / Units**	1 hour per week / 2 Units
7.	**Course Coordinator**	Assoc. Prof. Dr. Karim Abd Sajir karim.abd@alfarabiuc.edu.iq

8. Course Objectives

• Introduce students to the importance of the Foundations of Education in social life.

• Introduce students to ancient educational foundations, including Chinese, Roman, and Islamic traditions.

• Enable students to apply sound educational principles learned in their daily lives.

• Identify correct educational practices and benefit from them in public life.

9. Teaching and Learning Strategies

• Dialogue and discussion

• Problem solving

• Cooperative learning

10. Course Structure – Weekly Schedule (30 Weeks)

Week	Hrs	Learning Outcomes / Topic	Unit / Foundation	Teaching Method	Assessment
1	2	Meaning of Education, its objectives and necessity	Meaning of Education, its objectives and necessity	Dialogue & discussion	Q&A; directed to students
2	2	Theories and domains of education	Theories and domains of education	Dialogue & discussion	Q&A; directed to students
3	2	Historical foundations of education	Historical foundations of education	Dialogue & discussion	Q&A; directed to students
4	2	Ancient education	Historical foundations of education	Dialogue & discussion	Q&A; directed to students
5	2	Chinese education	Historical foundations of education	Dialogue & discussion	Q&A; directed to students
6	2	Greek education	Historical foundations of education	Dialogue & discussion	Q&A; directed to students
7	2	Medieval education	Historical foundations of education	Dialogue & discussion	Q&A; directed to students

Week	Hrs	Learning Outcomes / Topic	Unit / Foundation	Teaching Method	Assessment
8	2	Arab education before and after Islam	Historical foundations of education	Dialogue & discussion	Q&A; directed to students
9	2	Modern education	Historical foundations of education	Dialogue & discussion	Q&A; directed to students
10	2	Relationship between education and society	Social foundations of education	Dialogue & discussion	Q&A; directed to students
11	2	Relationship between the individual and the environment	Social foundations of education	Dialogue & discussion	Q&A; directed to students
12	2	Moral education	Social foundations of education	Dialogue & discussion	Q&A; directed to students
13	2	Family education	Social foundations of education	Dialogue & discussion	Q&A; directed to students
14	2	National education	Social foundations of education	Dialogue & discussion	Q&A; directed to students
15	2	Health education	Social foundations of education	Dialogue & discussion	Q&A; directed to students
16	2	Education and its impact on economic development	Economic foundations of education	Dialogue & discussion	Q&A; directed to students
17	2	Exploiting natural resources	Economic foundations of education	Dialogue & discussion	Q&A; directed to students
18	2	Education and research methodology	Scientific foundations of education	Dialogue & discussion	Q&A; directed to students
19	2	National and social foundations	National and social foundations	Dialogue & discussion	Q&A; directed to students
20	2	Education from an Islamic perspective	Education from an Islamic perspective	Dialogue & discussion	Q&A; directed to students
21	2	The comprehensive school	Educational renewal in Iraq	Dialogue & discussion	Q&A; directed to students
22	2	Systematic education (curriculum-based education)	Educational renewal in Iraq	Dialogue & discussion	Q&A; directed to students
23	2	Schools for gifted students and academic acceleration	Educational renewal in Iraq	Dialogue & discussion	Q&A; directed to students
24	2	The individual's acceptance of the primitive environment and how education wove itself into it	Primitive education	Dialogue & discussion	Q&A; directed to students
25	2	The individual having a specific social need	Social education	Dialogue & discussion	Q&A; directed to students
26	2	Creating harmony among civilizations	Education through history	Dialogue & discussion	Q&A; directed to students
27	2	Consistency and coherence in thought and action as dictated by religion	Islamic education	Dialogue & discussion	Q&A; directed to students
28	2	Social control and positive control	Social control	Dialogue & discussion	Q&A; directed to students
29	2	Practices we carry out throughout our lives, short or long	Culture and education	Dialogue & discussion	Q&A; directed to students
30	2	The individual having a specific social need (review)	Social education	Dialogue & discussion	Q&A; directed to students

11. Course Assessment

The grade is distributed out of 100 based on assigned tasks including: daily preparation, daily quizzes, oral exams, monthly tests, written exams, reports, etc.

Semester 1 – 20%			Semester 2 – 20%			Final Exam
Daily Exams	Participation & Activities	Research & Reports	Daily Exams	Participation & Activities	Research & Reports	
5	5	10	5	5	10	60

12. Learning and Teaching Resources

Type	Reference
Required Textbook	Foundations of Education (course textbook)
Main References	• The Family in Islam — Grand Ayatollah the Martyr Sayyid Muhammad al-Sadr. Published by the Heritage Foundation of the Martyr al-Sadr, Dar Maktabat al-Basa'ir, 2010. • Introduction to the Philosophy of Education — translated by Muhammad Sayf al-Din Fahmi. Anglo-Egyptian Library, Cairo, 1982. • The Philosophy of Islamic Education in the Noble Hadith — Bakr, Abd al-Jawwad Sayyid. Dar al-Fikr al-Arabi, Cairo, 1983.
Supplementary References (journals, reports, etc.)	Dr. Mahmoud al-Sayyid — Studies in Education and Society. Al-Nadim, Cairo, 1988.
Electronic References / Websites	None specified

Course Instructor: Assoc. Prof. Dr. Karim Abd Sajir

Course Description Form

1. Course Name	Educational Psychology
2. Course Code	Educational Psychology
3. Semester / Year	Annual
4. Date of Preparation	1/10/2025
5. Available Attendance Forms	Daily Attendance
6. Total Study Hours / Total Units	2 hours per week / 4 units
7. Course Coordinator	Name: Asst. Prof. Dr. Kareem Abd Sajir Email: karim.abd@alfarabiuc.edu.iq
8. Course Objectives	• Understand the concept of educational psychology, its fields of interest and study. • Understand the meaning of educational objectives, their classification, and conversion into instructional objectives. • Grasp the meaning of memory, its nature, and its role in teaching. • Recognize the importance of motivation in the field of educational psychology. • Understand the meaning of transfer of learning and its educational applications. • Grasp the meaning of concepts and their relationship to scientific and creative thinking. • Understand the meaning of feedback, its types, and its importance for the teacher. • Understand learning theories and their educational applications. • Grasp the factors affecting learning. • Understand skills and habits, how they are acquired, and how they can be utilized in learning.
9. Teaching & Learning Strategies	• Discussion • Problem Solving • Cooperative Learning

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit / Topic Name	Teaching Method	Assessment Method
1st	2	Understand the meaning of Educational Psychology	Educational Psychology and Its Development	Dialogue & Discussion	Directing questions and student answers
2nd 3rd 4th	2 2 2	Formulate behavioral objectives and frame a question achieving the goal	Educational Objectives	=	=
First Exam — First Semester					
6th 7th	2 2	Memory, its theories, and its role in teaching	Understanding Memory and Its Theories	=	=
8th 9th	2 2	Forgetting	Understanding Forgetting and Its Theories	=	=
10th 11th	2 2	Transfer of Learning	Understanding Transfer of Learning	=	=
Second Exam — First Semester					

Week	Hours	Required Learning Outcomes	Unit / Topic Name	Teaching Method	Assessment Method
13th 14th 15th	2 2 2	Motivation	Understanding the Role of Motivation in Learning	=	=
16th 17th 18th	2 2 2	Concepts and their relationship to scientific and creative thinking	Learning the Meaning of Concepts and Creative & Scientific Thinking	=	=
19th 20th	2 2	Feedback	Learning the Meaning of Feedback	=	=
First Exam — Second Semester					
22nd 23rd 24th	2 2 2	Learning Theories	Understanding Learning Theories	=	=
25th 26th	2 2	Factors Affecting Learning	Understanding Factors Affecting Learning	=	=
27th 28th	2 2	Individual Differences and Their Impact on Learning	Understanding Individual Differences	=	=
Second Exam — Second Semester					
30th	2	Mental Health	Mental Health	=	=

11. Course Assessment

Distribution of 100 marks according to tasks assigned to the student such as daily attendance, daily, oral, monthly, and written exams, reports, etc.

First Semester 20%			Second Semester 20%			Final Exam
Daily Exams	**Participation & Activities**	**Research & Reports**	**Daily Exams**	**Participation & Activities**	**Research & Reports**	
5	5	10	5	5	10	**60%**

12. Learning and Teaching Resources

Required Textbooks (Curriculum, if available)	Educational Psychology
Main References (Sources)	• Educational Psychology • Cognitive Psychology • Psychology of Individual Differences
Recommended Supporting Books and References (Scientific Journals, Reports...)	None
Electronic References / Websites	None

اسم التدريسي : ا.د كريم عبد ساجر

Course Description Form

Course Description

1.	**Educational Institution**	Al-Farabi University / College of Education
2.	**Scientific Department / Center**	Life Sciences
3.	**Course Name / Code**	English Language / First Stage / 2025-2026
4.	**Instructor Name**	Asst. Lecturer: Shatha Fadhil Obaid
5.	**Available Attendance Forms**	2 hours per week
6.	**Semester / Year**	Annual
7.	**Total Study Hours**	60
8.	**Description Preparation Date**	15 / 2 / 2026

9. Course Objectives

The course aims to:

1. Develop the four basic language skills in English (Listening, Speaking, Reading, and Writing) for first-stage students.
2. Equip students with a sound linguistic foundation in basic structures and grammar.
3. Develop the vocabulary necessary for communication in everyday and simple academic situations.
4. Enable students to write short, coherent paragraphs according to correct academic standards.
5. Enhance students' ability to understand short texts and analyze their main ideas and supporting details.
6. Train students in correct pronunciation and use of the language in real communicative situations.
7. Develop self-learning skills and effective use of dictionaries and educational resources.
8. Prepare students to transition to a higher language level in subsequent academic stages.

Course Outcomes, Teaching, Learning Methods, and Assessment

A - Cognitive Objectives

1. Finding and understanding information about vocabulary, pronunciation, usage, and grammar in reference texts, online resources, and English language dictionaries.

- Developing English language speaking skills necessary to become a contributing participant in small group activities, large group discussions, and oral presentations.

- Understanding texts using effective learning strategies for reading and vocabulary building.

B - Course-Specific Skills Objectives

The course is designed for first-year university students who wish to use their English for international communication. The course is built on materials taken from [New Headway Beginner], and recent scientific articles from news related to the student's specialization. The four skills — Listening, Speaking, Writing, and Reading — are developed throughout the training course.

Teaching and Learning Methods

• Lecture and discussion

Assessment Methods

• Home assignments related to the four skills: Listening, Speaking, Reading, and Writing

C - Emotional and Value Objectives

1. Preparing students for immersion in English-speaking communities.
2. Understanding university textbooks in their specialization.
3. Preparing students for successful careers related to the English language.

11. Course Structure

Week	Hours	Unit / Topic	Required Learning Outcomes	Teaching Method	Assessment Method
1	2	Greetings & Introductions	Finding and understanding information about vocabulary, pronunciation, usage, and grammar in reference texts, online resources, and English language dictionaries.	In-person	Questions during lectures, quiz, and in-class exam
2	2	Greetings & Introductions	Understanding texts using effective learning strategies for reading and vocabulary building.	In-person	Questions during lectures, quiz, and in-class exam
3	2	Times	Developing English speaking skills to become a contributing participant in small group activities, large group discussions, and oral presentations.	In-person	Questions during lectures, quiz, and in-class exam
4	2	Times	Developing English speaking skills to become a contributing participant in small group activities, large group discussions, and oral presentations.	In-person	Questions during lectures, quiz, and in-class exam
5	2	Numbers	Developing English speaking skills to become a contributing participant in small group activities, large group discussions, and oral presentations.	In-person	Questions during lectures, quiz, and in-class exam
6	2	Numbers	Developing English speaking skills to become a contributing participant in small group activities, large group discussions, and oral presentations.	In-person	Questions during lectures, quiz, and in-class exam
7	2	Es & S	Understanding texts using effective learning strategies for reading and vocabulary building.	In-person	Questions during lectures, quiz, and in-class exam
8	2	Short Exam	Finding and understanding information about vocabulary, pronunciation, usage, and grammar in reference texts and online resources.	In-person	General questions covering all topics via Bubble Sheet
9	2	Discussions	Understanding texts using effective learning strategies for reading and vocabulary building.	In-person	Questions during lectures, quiz, and in-class exam
10	2	Prepositions	Developing English speaking skills to become a contributing participant in small group activities, large group discussions, and oral presentations.	In-person	Questions during lectures, quiz, and in-class exam
11	2	Prepositions	Developing English speaking skills to become a contributing participant in small group activities, large group discussions, and oral presentations.	In-person	Questions during lectures, quiz, and in-class exam
12	2	Have / Has	Understanding texts using effective learning strategies for reading and vocabulary building.	In-person	Questions during lectures, quiz, and in-class exam

Week	Hours	Unit / Topic	Required Learning Outcomes	Teaching Method	Assessment Method
13	2	Have / Has	Developing English speaking skills to become a contributing participant in small group activities, large group discussions, and oral presentations.	In-person	Questions during lectures, quiz, and in-class exam
14	2	Specialized English	Understanding texts using effective learning strategies for reading and vocabulary building.	In-person	Questions during lectures, quiz, and in-class exam

D - General and Qualifying Transferable Skills

(Other Skills Related to Employability and Personal Development)

1. The learner becomes more effective, independent, and self-confident.
2. Improving their general study skills and professional life management.
3. Clarifying personal goals and evaluating progress toward achieving them.
4. The ability to identify, formulate, and solve problems.

اسم التدريسي : م.م شذى فاضل

1. Course Name: Arabic Language Curriculum

2. Course Code:

3. Semester / Year: Annual

4. Date of Preparing this Description: 18/2/2026

5. Available Forms of Attendance: First Stage

6. Number of Study Hours (Total) / Number of Units (Total): hours per week

30 hours (30 weeks at the rate of 1 hour per week) / Number of Units = 2 units

7. Name of the Course Coordinator: Asst. Lect. Ghufran Hadi Abdullah

8. Course Objectives

By the end of the academic year, students will be able to: 1. Know the basic grammatical rules of the Arabic language. 2. Apply those rules to poetic and prose texts. 3. Become acquainted with the concept of literature and its development across literary eras, as well as know the types of poetry across those eras. 4. Become acquainted with the purposes of Arabic poetry across the literary eras.	Course Subject Objectives
A – Cognitive Objectives ◦ Knowledge. ◦ Comprehension. ◦ Application, analysis, and evaluation. **B – Course-Specific Skill Objectives** ◦ The student's knowledge of the spelling and grammatical rules of the Arabic language. ◦ Applying those rules in the required manner. **C – Affective and Value-Based Objectives** • That the student comes to love the subject of Arabic language. • That the student engages with the way the course material is presented by the instructor. **D – General and Transferable Qualification Skills (Other Skills Related to Employability and Personal Development)** ◦ Verbal communication. • The skill of presenting oral questions.	**Module Learning Outcomes** Learning outcomes of the course
Teaching and Learning Methods • Lecture. • Discussion. • Interrogation (Q&A method).	**Strategies** Strategy
Evaluation Methods • Oral exams. • Written exams (essay and objective).	

Evaluation Method	Learning Method	Hours	Unit or Topic Name		Week
Oral exam	Lecture method		Hamzat al-Wasl and Hamzat al-Qat' (Connecting and Cutting Hamza)		Week 1
Oral exam	Lecture method		The Medial Hamza		Week 2
Oral exam	Lecture method		Punctuation Marks		Week 3
Written exam	Lecture method		The Verb and Its Types in the Arabic Language		Week 4
Oral exam	Lecture method		The Five Verbs (Al-Af'al al-Khamsa)		Week 5
Written exam	Lecture method		Jussive Mood of the Present Tense Verb		Week 6
Oral exam	Lecture method		Kana and Its Sisters		Week 7
Oral exam	Lecture method		Sound Masculine Plural and Its Attachments		Week 8
Oral exam	Lecture method		Sound Feminine Plural and Its Attachments		Week 9
Written exam	Lecture method		The Long Ta and the Tied Ta (Tā Maftūḥa and Tā Marbūṭa)		Week 10
Written exam	Lecture method		The Subject and Predicate (Al-Mubtada and Al-Khabar)		Week 11
Oral exam	Lecture method		The Agent / Doer of the Action (Al-Fa'il)		Week 12
Written exam	Lecture method		Inna and Its Sisters		Week 13
Written exam	Lecture method		The Five Nouns (Al-Asma al-Khamsa)		Week 14
Written exam	Lecture method		The Absolute Object (Al-Maf'ul al-Mutlaq)		Week 15
Oral exam	Lecture method		The Active Participle (Ism al-Fa'il)		Week 16
Written exam	Lecture method		The Intensive Form (Sighat al-Mubalagha)		Week 17
Oral exam	Lecture method		The Quasi-Adjective (Al-Sifa al-Mushabbaha)		Week 18
Written exam	Lecture method		The Passive Participle (Ism al-Maf'ul)		Week 19
Oral exam	Lecture method		The Comparative/Superlative Noun (Ism al-Tafdil)		Week 20
Oral exam	Lecture method		The Active Participle (Ism al-Fa'il)		Week 21

Written exam	Lecture method		The Intensive Form (Sighat al-Mubalagha)		Week 22
Oral exam	Lecture method		The Quasi-Adjective (Al-Sifa al-Mushabbaha)		Week 23
Oral exam	Lecture method		The Concept of Literature and Its Development Across the Eras		Week 24
Written exam	Lecture method		Poetry and Its Types in Arabic Literature		Week 25
Oral exam	Lecture method		Poetry in the Pre-Islamic (Jahili) and Islamic Eras		Week 26
Oral exam	Lecture method		Poetry in the Umayyad and Abbasid Eras		Week 27
Oral exam	Lecture method		Modern Arabic Poetry		Week 28
Written exam	Lecture method		Purposes of Arabic Poetry: 1. Satire (Hija)		Week 29
Oral exam	Lecture method		The Purpose of Description and the Purpose of Elegy		Week 30

9. Course Evaluation

The grade out of 100 is distributed according to the tasks assigned to the student, such as daily preparation, daily exams, and monthly exams.

10. Learning and Teaching Resources

History of Arabic Literature, by Shawqi Dayf.

Arabic Grammar: Rules and Meanings, by Dr. Mohammed Fadel.

A Summary of Arabic Language Grammar, by Saeed Al-Afghani.

Asst. Lect. Ghufran Hadi Abdullah

Name of the Course Instructor

1. Course Name

(Computers)

2. Course Code

Comp181

3. Semester / Year: (Annual / 2025-2026)

4. Date of Preparing this Description: (21-1-2026)

5. Available Forms of Attendance: In-person and Practical

6. Number of Study Hours (Total) / Number of Units (Total)

30 hours (30 weeks at the rate of 1 hour per week) / Number of Units = 2 units

7. Name of the Course Coordinator (mention if more than one)

Name: Asst. Lect. Niran Ammar Ismail Alwan

niran.ammar@alfarabiuc.edu.iq

8. Course Objectives

Course Subject Objectives

- Qualifying and training the student to identify the basic components of the computer, along with understanding how the various computer components work.
- Enabling the student to master the skills of using the basic computer.
- Qualifying, training, and teaching the student to use the basic programs and how they work.
- Helping the student solve various computer problems while benefiting from those problems.
- Learning to use editing programs such as Word and PowerPoint, and working with the various files associated with those programs.

Teaching and Learning Strategies

Strategies

Strategy

1. Lecture method
2. Discussion method
3. Inquiry-based method
4. Practical demonstration method (through supporting and illustrative videos for the lectures)

Evaluation Method	Learning Method	Unit or Topic Name	Required Learning Outcomes	Hours	Week
In-person quarterly and daily exams	In-person lectures and discussion	Computer Basics	Knowing the basics of how the computer works	8	4 weeks
In-person quarterly and daily exams	In-person lectures and discussion	Computer components, computer security, and software licensing	Identifying computer components and how to protect the computer	20	10 weeks
In-person quarterly and daily exams	In-person lectures and discussion	Types of operating systems used	The systems used	4	2 weeks

In-person quarterly and daily exams	In-person lectures and discussion	Learning Word 2010	Basics of the Word program	14	7 weeks
In-person quarterly and daily exams	In-person lectures and discussion	Learning PowerPoint 2010	Basics of the PowerPoint program	14	7 weeks

9. Course Evaluation	
5. 36 points (monthly written exams)	
6. 4 points (daily preparation, daily oral exams, and reports)	
7. 60 points (final exam – written)	
10. Learning and Teaching Resources	
None	**Required Textbooks (Curriculum, if any)**
Computer Basics and Its Applications	**Main References (Library Sources)**
Microsoft Word 2010 by Sherine Al-Asry Microsoft Excel 2010 by Sherine Al-Asry https://books-library.net/free-167753289-download	**Electronic References, Websites**

Name of the Course Instructor: Asst. Lect. Niran Ammar Ismail Alwan

Course Description Form

1. Course Name	Democracy and Human Rights
2. Course Code	Democracy and Human Rights
3. Semester / Year	Annual
4. Date of Preparation	1/10/2025
5. Available Attendance Forms	Daily Attendance
6. Total Study Hours / Total Units	1 hour per week / 2 units
7. Course Coordinator	Name: Asst. Prof. Dr. Hadi Khaleef Kareem Al-Jubouri Email: hadi.khaleef@alfarabiuc.edu.iq
8. Course Objectives	• Introduce students to the concept of democracy, its origins and development. • Familiarize students with the principles of human rights and their importance in society. • Develop a culture of citizenship and respect for the law. • Promote the values of freedom, equality, justice, and tolerance. • Enable students to understand constitutional rights and duties. • Raise awareness of political and civic participation.
9. Teaching & Learning Strategies	• Dialogue and Discussion • Problem Solving • Cooperative Learning • Brainstorming • Real-Life Case Studies

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit / Topic Name	Teaching Method	Assessment Method
1	2	Define the concept of human rights and their importance in society	Introduction to Human Rights and its Concept	Dialogue & Discussion	Directing questions and student answers
2	2	Clarify the characteristics and fundamental features of human rights	Characteristics of Human Rights	=	=
3	2	Trace the historical stages of human rights development	Historical Development of Human Rights	=	=
4	2	Distinguish between civil and personal rights and their examples	Types of Human Rights: Civil and Personal Rights	=	=
5	2	Explain political rights and their importance to citizens	Political Rights	=	=
6	2	Clarify the concept of economic rights and their role in achieving a dignified life	Economic Rights	=	=
7	2	Explain the importance of social and cultural rights	Social and Cultural Rights	=	=
8	2	Identify solidarity rights and their main applications	Solidarity Rights and Third-Generation Rights	=	=

Week	Hours	Required Learning Outcomes	Unit / Topic Name	Teaching Method	Assessment Method
9	2	Analyze the principles of human rights in Islamic law	Human Rights in Islamic Sharia	=	=
10	2	Review the rights and freedoms guaranteed by the Iraqi Constitution	Human Rights in the Iraqi Constitution of 2005	=	=
11	2	Interpret constitutional principles related to equality and security	Equality and the Right to Life and Personal Security	=	=
12	2	Clarify legal guarantees for individual rights	Right to Privacy, Nationality, and Rights of the Accused	=	=
13	2	Identify economic and social rights stipulated in the Constitution	Economic and Social Rights in the Iraqi Constitution	=	=
14	2	Explain national mechanisms for protecting human rights	National Mechanisms for Human Rights Protection	=	=
15	2	Clarify the concept of the rule of law and its relation to human rights	The Rule of Law and Respect for Rights and Freedoms	=	=
16	2	Explain the importance of separation of powers in protecting rights	Principle of Separation of Powers	=	=
17	2	Clarify the role of an independent judiciary in protecting human rights	Judicial Independence	=	=
18	2	Link citizenship to protecting rights and duties	Citizenship and Human Rights	=	=
19	2	Define international humanitarian law and its objectives	Concept of International Humanitarian Law	=	=
20	2	Identify the Geneva Conventions and their role in protecting conflict victims	The Four Geneva Conventions	=	=
21	2	Interpret the fundamental principles of international humanitarian law	Principles of International Humanitarian Law	=	=
22	2	Clarify the provisions of Common Article 3 on non-international conflicts	Common Article 3 of the Geneva Conventions	=	=
23	2	Explain the provisions of Additional Protocol I	Additional Protocol I of 1977	=	=
24	2	Explain the provisions of Additional Protocol II	Additional Protocol II of 1977	=	=
25	2	Compare the two laws and identify similarities and differences	Relationship between IHL and Human Rights Law	=	=
26	2	Clarify the role of national institutions in implementing IHL	National Mechanisms for Implementing IHL	=	=
27	2	Analyze the impact of separation of powers on consolidating democracy	Importance of Separation of Powers in Democratic Systems	=	=
28	2	Distinguish between the powers' jurisdictions and mechanisms of mutual oversight	The Three Powers and Checks and Balances Mechanisms	=	=
29	2	Define political parties and identify their different types	Concept of Political Parties and Their Types	=	=
30	2	Compare different party systems and analyze their characteristics	Party Systems (Bipartisan, Multi-party, Dominant Party)	=	=

11. Course Assessment

Distribution of 100 marks according to tasks assigned to the student such as daily attendance, daily, oral, monthly, and written exams, reports, etc.

First Semester 20%			Second Semester 20%			Final Exam
Daily Exams	Participation & Activities	Research & Reports	Daily Exams	Participation & Activities	Research & Reports	

5	5	10	5	5	10	**60%**

12. Learning and Teaching Resources

Required Textbooks (Curriculum, if available)	Democracy and Human Rights
Main References (Sources)	• Universal Declaration of Human Rights, United Nations, 1948. • International Covenant on Civil and Political Rights, UN, 1966. • International Covenant on Economic, Social and Cultural Rights, UN, 1966. • The Four Geneva Conventions, ICRC, 1949. • Additional Protocols to the Geneva Conventions, 1977. • Constitution of the Republic of Iraq, 2005.
Recommended Supporting Books and References (Scientific Journals, Reports...)	• ICRC, Introduction to International Humanitarian Law. • OHCHR, Human Rights: A Basic Student Guide. • International Human Rights Law, by a group of researchers and specialists. • International Humanitarian Law, by specialists in international law. • Political Systems and Constitutional Law — reference on separation of powers and political parties. • Annual reports of the High Commission for Human Rights in Iraq. • Peer-reviewed journals specializing in human rights and international humanitarian law.
Electronic References / Websites	None

اسم التدريسي : هادي خليف كريم

Al-Farabi University College

Course Description

General Geology 1

1.	**Course Name**	General Geology 1
2.	**Course Code**	GEO101
3.	**Semester / Year**	First Semester / First Year
4.	**Date of Preparation**	21 / 2 / 2026
5.	**Attendance Mode**	In-person (face-to-face)
6.	**Credit Hours / Units**	30 hours total (30 weeks × 1 hour/week) / 2 Units
7.	**Course Coordinator**	Prof. Dr. Raad Mohammed Wafer raad.mohammed@alfarabiuc.edu.iq

8. Course Objectives

• Introduction to Earth's Origin: Understand the internal structure of the Earth and the theory of plate tectonics.

• Mineral Identification: Enable students to recognize rock-forming minerals and their physical properties.

• Study of Rocks: Understand the rock cycle and distinguish between igneous, sedimentary, and metamorphic rocks.

• Surface Processes: Study the effects of weathering and erosion in shaping the Earth's surface.

9. Teaching and Learning Strategies

1. Students develop a distinguished academic standing in society.
2. Students are characterized by good conduct and ethics learned from their instructors.
3. Students make appropriate decisions when facing challenging work situations.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit / Topic	Teaching Method	Assessment
1	2	Understand the origin of the Earth	Introduction to Geology and Earth's internal structure	Discussion	Participation
2	2	Understand continental movement	Plate Tectonics	Illustrated presentation	Assignment
3	2	Identify mineral elements	Minerals: Physical and Chemical Properties	Lab / Specimens	Quiz
4	2	Understand volcanic rocks	Igneous Rocks	Discussion	Assignment
5	2	Study surface processes	Weathering, Erosion, and Soil Formation	Video presentation	Report
6	2	Understand depositional environments	Sedimentary Rocks	Rock specimens	Participation

Week	Hours	Required Learning Outcomes	Unit / Topic	Teaching Method	Assessment
7	2	Understand rock metamorphism	Metamorphic Rocks	Discussion	Assignment
8	2	Understand geological structures Correlate time with stratigraphy	Geological Structures (Folds & Faults) Historical Geology	Quiz Discussion	Quiz Discussion

11. Course Assessment

The grade is distributed out of 100 based on assigned tasks including: daily preparation, daily quizzes, oral exams, monthly tests, written exams, reports, etc.

12. Learning and Teaching Resources

Type	Reference
Required Textbook	"Physical Geology" by Charles Plummer
Main References	None specified
Supplementary References (journals, reports, etc.)	"Earth: An Introduction to Physical Geology"
Electronic References / Websites	None specified

Course Instructor: Prof. Dr. Raad Mohammed Wafer