

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

Academic Programs Description
University of Hilla
College of Education
Department of Chemistry

2026



University: Al-Hilla University

College: College of Education

Scientific Department: Department of Chemistry

Academic/Professional Program: Bachelor in Chemistry

Final Degree: Bachelor of Science (B.Sc.) in Chemistry

Academic System: Annual

Description Preparation Date: September 15

File Completion Date: September 21, 2025

Signature

Head of Department Name

Fadhil Sami Zghair

Date

21-9-2025

Signature

Scientific Associate Name

Date

21/9/2025

The file was checked by the Division of Quality Assurance and University Performance

Name of the Head of the Quality Assurance and University Performance Division

Date 21/9/2025

Fayza Hayder Abboud

Signature



Approval of the Dean

1.Vision

The Department of Chemistry is an educational and scientific department that seeks to prepare teaching cadres with a contemporary civilized perspective, capable of inducing educational and social changes associated with the value system of society. The department also aspires to be among the globally classified departments of the college at the research and academic levels, distinguished in teaching the foundations and principles of modern chemistry, and in community participation that contributes to human and knowledge development to keep pace with rapid scientific progress.

2.Program Mission

- Preparing and training specialized and efficient educational cadres to meet the needs of schools in chemistry science specializations, providing scientific and educational consultations, conducting research and studies, and contributing to improving and developing the reality of education in accordance with high-quality academic and scientific standards.
- Supplying libraries of all kinds with Master's theses and scientific research that harmonize with the desired scientific and educational goals of the Chemistry Department.
- Training students on scientific concepts and facts by providing modern lecture delivery methods and transferring modern information in all precise specializations to equip them with scientific skills and expertise, moving away from the method of delivering ready-made lectures.
- Equipping students with modern knowledge communication skills by activating instructors' websites so that the instructor can set scientific plans including discussions, questions, solutions, and lectures for student-instructor communication, enabling the instructor to monitor the curriculum items precisely and strictly.

3.Program Objectives

- Preparing female teachers specialized in chemistry sciences to supply middle and high schools.
- Preparing female teachers scientifically, educationally, and socially to enable them to perform their profession as teachers and educators.
- Instilling a scientific tendency among graduated female teachers in dealing with and addressing scientific and educational situations in a scientific, educational, and civilized manner.
- Empowering student-teachers with scientific and educational knowledge and equipping them with effective teaching skills that enable them to perform the teaching profession.



- Building the scientific and educational personality of the student-teacher to enable her to positively influence and educationally interact with her students.
- Instilling values of citizenship, loyalty, and other social virtues to avoid wrong behaviors that do not serve education.

4. Program Structure

Reviews*	Percentage	Credit Hours	Number of cycles	Program Structure
Essential	8%	16	7	Requirements of the institution
Essential	16.5%	32	8	College Requirements
Essential	75%	146	26	Department Requirements
			Second and third	Summer Training
				Other



Curriculum / Study Plan
First Stage (Stage 1)

Course Code	Course Name	Theoretical Hours	Practical Hours	Credit Units
HECM3101	Inorganic Chemistry	2	3	4
HECM3102	Organic Chemistry	2	3	7
HECM3103	Analytical Chemistry	3	3	9
HECM3104	Biology	1	2	4
HECM3105	Computer Science	-	2	2
HECM3106	Mathematics	1	-	2
HECM3107	Human Rights and Democracy	1	-	2
HECM3108	Educational Psychology	2	-	4
HECM3109	Foundations of Education	2	-	4
HECM3210	Arabic Language	1	-	2
HECM3211	English Language	1	-	2

Second Stage (Stage 2)

Course Code	Course Name	Theoretical Hours	Practical Hours	Credit Units
HECM3201	Inorganic Chemistry	2	3	7
HECM3202	Organic Chemistry	2	3	7
HECM3203	Analytical Chemistry	2	3	7
HECM3212	Physical Chemistry	3	3	9
HECM2205	Computer Science	-	2	4



Course Code	Course Name	Theoretical Hours	Practical Hours	Credit Units
HECM3213	Mathematics (Calculus)	1	-	2
HECM3214	Developmental Psychology	2	-	4
HECM3215	Secondary Education & School Management	2	-	4
HECM3211	English Language	2	-	4
HECM3216	Crimes of the Ba'ath Party	1	-	2

Third Stage (Stage 3)

Course Code	Course Name	Theoretical Hours	Practical Hours	Credit Units
HECM3317	Coordination Chemistry	2	3	7
HECM3302	Organic Chemistry	2	3	7
HECM3318	Industrial Chemistry	2	-	4
HECM3312	Physical Chemistry	2	3	7
HECM3319	Biochemistry	2	3	7
HECM3320	Curricula and Teaching Methods	1	2	4
HECM3321	Counseling and Mental Health	2	-	4
HECM3322	Scientific Research Methodology	2	-	4
HECM3323	Elective Course	2	-	4
HECM3311	English Language	2	-	4



Fourth Stage (Stage 4)

Course Code	Course Name	Theoretical Hours	Practical Hours	Credit Units
HECM3424	Instrumental Analysis	3	3	9
HECM3426	Organic Spectroscopic Diagnosis	2	3	7
HECM3418	Industrial Chemistry	2	3	7
HECM3427	Quantum Chemistry	2	-	4
HECM3419	Biochemistry	2	-	4
HECM3428	Measurement and Evaluation	2	-	4
HECM3429	Observation and Practicum	1	2	4
HECM3430	Graduation Project	-	3	3
HECM3423	Elective Course	2	-	4
HECM3411	English Language	2	-	4



1. Expected learning outcomes of the program

Knowledge

Methods of assessing knowledge and understanding

1. Comprehensive Written Examinations (Theoretical and Quizzes):

Including midterm and final examinations, as well as unannounced short quizzes. These tests focus on measuring the graduates' comprehension of chemical laws and theories (such as Quantum Chemistry and Instrumental Analysis) and educational concepts, alongside their ability to solve mathematical problems and analyze chemical equations.

2. Direct Laboratory and Practical Assessment:

Given that the curriculum includes intensive practical sessions across most courses (such as Organic, Inorganic, and Analytical Chemistry), understanding is evaluated through direct performance inside the laboratory and the graduates' capability to bridge theoretical knowledge with practical application, in addition to evaluating periodic reports written upon the completion of each laboratory experiment.

3. Evaluation of Research and Graduation Projects:

The depth of scientific knowledge and critical thinking is measured through the "Graduation Project" and the "Scientific Research Methodology" course in advanced stages. Assessment here is based on the graduates' ability to collect and interpret scientific data, formulate solutions to chemical or educational problems, and defend their research findings before discussion committees.

4. Professional and Field Performance Assessment (Observation and Practicum):

This aspect focuses on measuring the applied understanding of educational skills and teaching methods. Graduates are evaluated during their

Learning Outcomes

1. Scientific and Cognitive Learning Outcomes: Qualifying graduates to gain a deep understanding of basic and advanced theories and concepts across various branches of chemistry (Organic, Inorganic, Analytical, Physical, Biochemistry, and Industrial), alongside the ability to handle laboratory equipment and conduct experiments and analyses with efficiency and accuracy.

2. Educational and Professional Learning Outcomes: Empowering graduates to apply effective teaching skills, deploy modern instructional strategies, and manage classrooms in middle and secondary schools, grounded in a solid understanding of the foundations of educational psychology and assessment methods.

3. Research and Analytical Learning Outcomes: Equipping graduates with scientific research and logical thinking skills that enable them to identify and address scientific and educational problems through a systematic academic approach, in addition to acquiring the data collection and analysis skills necessary for completing graduation projects and research.

4. Communication Outcomes and Ethical Values: Developing graduates' capacity for effective digital knowledge communication with students and the academic community, while maintaining full commitment to the ethics of the teaching profession, and reinforcing the values of scientific integrity, honesty, as well as social and educational responsibility.



field practicum in middle and secondary schools based on their performance in lecturing, classroom management, and the implementation of modern educational measurement and evaluation techniques for students.

Skills

Methods of assessing thinking skills

1. Direct Practical Assessment and Laboratory Examinations (OSPE):

Laboratory skills are measured through direct practical tests inside the laboratories (such as Biochemistry, Industrial, and Analytical Chemistry), where graduates are assigned to perform a specific experiment or identify an unknown substance. They are evaluated based on performance accuracy, speed in handling equipment, and the quality of the submitted scientific report.

2. Field Assessment in the Workplace (Observation and Practicum):

Teaching and pedagogical skills are realistically evaluated during the field practicum period in schools through assessment visits conducted by both scientific and educational supervisors to monitor the graduates' classroom performance, observe their ability to convey information, manage student behavior, and deploy modern teaching aids.

3. Graduation Research Defense and Presentations:

Research, analytical, and communication skills are evaluated by requiring graduates to deliver a visual presentation of their graduation project and defend it before a specialized scientific committee. This measures their proficiency in presentation and

Learning Outcomes

1. Advanced Technical and Laboratory Skills:

Possessing the capacity for safe and efficient handling of sensitive laboratory equipment, performing experiments in organic spectroscopic diagnosis, instrumental analysis, and industrial preparation, while linking practical outcomes with quantitative mathematical and physical theories and equations.

2. Effective Teaching and Classroom Management Skills:

Acquiring mechanisms for lecture planning and constructing study plans, applying modern teaching strategies suitable for middle and secondary school students, alongside proficiency in utilizing educational measurement and assessment tools to diagnose student levels.

3. Digital and Research Skills:

Proficiency in utilizing computers and software for processing scientific data, activating digital knowledge communication tools and educational platforms for student interaction, alongside the skill of drafting



persuasion skills, as well as their ability to defend the scientific and educational findings and ideas presented in their research.	academic research following rigorous scientific research methodologies.
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Values	
Statement of Learning Outcomes	Learning Outcomes
• Student participation in community events outside the college campus. • Visiting community institutions and learning about the conditions of those within. • Appropriate selection of research project titles, demonstrating novelty and innovation in their approach. • Research projects successfully passing scientific integrity and plagiarism checks.	• Mastering the fundamentals of civil society. • Becoming an active member of society. • Understanding the formulation of research projects. • Comprehending research writing ethics and scientific integrity.

Teaching and Learning Strategies

- Lecture
- Dialogue and discussion
- Cooperative learning (division into groups)
- Brainstorming
- Reciprocal teaching
- Publishing lectures on the college or department website and for all teachers and all subjects
- Use of display and audio equipment
- Writing research and reports in English
- Speaking in English in class and when participating
- Conducting research and experiments to achieve the goals of sustainable development

2. Evaluation methods

- The direct way to ask and answer it in the lecture
- Expected and unannounced daily exams
- Evaluating research and evaluating its writing in terms of style, expression and spelling



- Ask questions to measure listening and attention in English
- Participation of students in evaluating the performance of their fellow students
- Practical assessment exams for listening, speaking and reading
- Monthly and Quarterly Exams
- Theoretical final exams



Professional Development

Mentoring new faculty members

- Work on diversifying classroom management methods and giving lectures
- The new faculty is exposed to the visit of the head of the department and the old teachers during the lectures
- Conducting personal interviews to know the teaching competence and skill in teaching
- Publishing research in international journals with an impact factor, writing literature, and participating in workshops and conferences

Professional development of faculty members

- The academic program is reviewed periodically in order to identify and fix its gaps.
- Annual evaluation of each unit from the head of the department or the rapporteur of the department.
- Periodic faculty reviews of the academic program.
- Establishing an external advisory body for the department that includes representatives of the student and the beneficiaries of this course.
- Periodic evaluation by the head of the department for faculty members.
- Students evaluate the faculty member by electronic referendum.
- Self-evaluation of the faculty member.
- Student evaluation of a stage of study by electronic poll method.
- Coordination with the Quality Division in the college and the university to follow up the application of the academic program in the department.

1. Personal Development Planning

1. Identify the social determinants of health to reduce disparities in access to quality care.
2. Self-awareness (self-awareness) 0 Examine and reflect on personal knowledge, skills, abilities, beliefs, prejudices, motivations, and emotions that can enhance or limit personal and professional growth.
3. Professionalism 0 Demonstrate behaviors and values consistent with the trust that patients, other healthcare providers, and the community place in the profession.
4. Learner(s) 0 Develop, integrate, and apply knowledge from foundational sciences (e.g. dentistry and social/behavioral/managerial and clinical sciences) to
5. Evaluate the scientific literature, explain pharmacological action, solve therapeutic problems, and advance the population. Healthcare and patient-centered.
6. Design prevention, intervention and education strategies for individuals and communities to manage chronic diseases and improve health.
7. Educate all audiences by identifying the most effective and sustainable methods of conveying



information and assessing understanding.

2. Acceptance Criteria

1. The general average of central admission, which is within the applicable limits and according to the directives of the Ministry of Higher Education and Scientific Research.
2. Personal interview with students applying for admission and recording speech, behavioral or personality defects.

3. The most important sources of information about the program

The Quality Division in the college through the Quality Division at the university, which adheres to the quality conditions and upgrading the scientific, knowledge, skill and scientific research level according to the data of the Ministry of Higher Education and Scientific Research, which seeks with international quality conditions to raise the efficiency of the academy in line with the efficiency of the academy.

4. Program Development Plan

- Work to motivate students to use medical books
- Work on developing conversation, translation and reading skills by taking advantage of websites and means
- Other contemporary.
- Work to encourage students to know the most important books of medicine



Curriculum Skills Outline																		
مخرجات التعلم المطلوبة من البرنامج																		
General and qualifying skills transferred (other skills related to employability and personal development)				Emotional and value goals				Program Skills Objectives				Cognitive goals				Basic or optional	Course Name	Course Code
د4	د3	د2	د1	ج4	ج3	ج2	ج1	ب4	ب3	ب2	ب1	د4	د3	د2	د1	First stage Semester 1	Anatomy of skeleton	HAST41101
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		General physics	HAST41102
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Second Stage Semester 1															
HAST42116	Conventional Radiological Equipment techniques		☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
HAST42117	Radiographic techniques for upper limbs		☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
HAST42118	Special radiological procedures of gastrointestinal tract and bones		☒	☒	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒
HAST42119	Radiological anatomy of head and upper limbs		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
HAST42120	Fundamentals of Radio-physics		☒	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒
HAST42121	Fundamentals of radiation protection		☒	☒	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒
HAST42122	Crimes of the Baath regime in Iraq		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
HXRT32223	Computed tomography Equipment Techniques		☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
HXRT32224	Radiographic techniques for lower limbs		☒	☒	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒
HXRT32225	Special radiological procedures of biliary and reproductive system		☐	☒	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒



Semester 2														fourth Stage Semester 1													
Techniques	HAST43237	HAST43238	HAST43239	HAST43240	HXRT33241	HAST43235	Computed tomography imaging of head and spinal cord	Magnetic resonance imaging principles and head exam	Abdominal Ultrasound imaging	Medicine of internal diseases	HAST44142	HAST44143	HAST44144	HAST44145													
Radiographic techniques of thorax and abdomen	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
Special radiological procedures of the cardiovascular and central nervous system	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
Radiological anatomy of thorax and abdomen	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
Systemic Pathology	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
Physics of Ultrasound	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
Computer applications2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
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Course Description Form

1. Course Name: Human Rights Course – First Stage	
2. Course Code: HECM3107	
3. Semester / Year: 2025-2026	
4. Description Preparation Date: 8/4/2026	
5. Available Attendance Forms: Weekly	
6. Number of Credit Hours (Total) / Number of Units (Total): Total study hours (60) / Total units (2)	
7. Course administrator's name (mention all, if more than one name) Name: Afrah Abbas Abdul Ali Email:	
8. Course Objectives	
Course Objective	- Introducing the student to the principles of human rights law, its sources, and its characteristics. - Introducing the student to the nature of the relationship between human rights law and other related laws. - Introducing the student to the most important of these rights. - Identifying the most important human rights and international conventions in this field.
9. Teaching and Learning Strategies	
Strategy	Teaching and learning methods for the purposes of course design are defined as (methods of organizing communication and classroom interaction between the instructor and students, and among the students themselves, in order to achieve effective interaction with the learning content and achieve



the course learning outcomes).

And, God willing, the course will be taught using a set of methods including

1. Traditional method represented by explanation on the teaching board
2. Assigning students to present reports on specific topics as a classroom activity related to course content.
3. Using a variety of methods including

10. Course Structure

Week	Hours	Learning Outcomes	Topic	Teaching Method	Evaluation
Week One	2	Definition of human rights	Human rights: definition and objectives	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written, and practical tests
Week Two	2	Roots of human rights and their development in human history	Human rights in ancient times	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written, and practical tests
Week Three	2	Human rights in ancient civilizations	Mesopotamian civilization	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written, and practical tests
Week Four	2	Human rights in divine laws	Human rights in Islam	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written, and practical tests
Week Five	2	Human rights in the Middle Ages	Political doctrines and theories	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written, and practical tests



Week Six	2	Human rights in charters and revolutions	Constitutions and declarations	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written, and practical tests
Week Seven	2	Human rights in modern history	International recognition of human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written, and practical tests
Week Eight	2	Regional international recognition	Human rights	Lecture / Discussion	Exam
Week Nine	2	NGOs and human rights	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written, and practical tests
Week Ten	2	National human rights organizations	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written, and practical tests
Week Eleven	2	Human rights in Iraqi constitutions	Reality vs theory	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written, and practical tests
Week Twelve	2	Human rights and freedoms	Universal Declaration	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written, and practical tests
Week Thirteen	2	Human rights and freedoms	Regional and national constitutions	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written, and practical tests
Week Fourteen	2	Types of human rights	Economic, social, civil, political	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written, and practical tests
Week Fifteen	2	Human rights		Lecture / Discussion	Exam



Week Sixteen	2	Modern human rights	Development and environment	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests
Week Seventeen	2	Characteristics of human rights	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests
Week Eighteen	2	Types of human rights	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests
Week Nineteen	2	Human rights conventions	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests
Week Twenty	2	International treaties	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests
Week Twenty-One	2	Constitutional guarantees	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests
Week Twenty-Two	2	Human rights bodies	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests
Week Twenty-Three	2	Human rights in regional constitutions	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests
Week Twenty-Four	2	Local human rights bodies	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests
Week Twenty-Five	2	Regional human rights	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests



		bodies			
Week Twenty-Six	2	UN role in human rights	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests
Week Twenty-Seven	2	International courts	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests
Week Twenty-Eight	2	International resolutions	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests
Week Twenty-Nine	2	Human rights violations bodies	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests
Week Thirty	2	Review	Review	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests

11.Course Evaluation

25% midterm exams, 25% assignments and daily preparation, 50% final exam

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Human Rights (Prof. Dr. Hamid Hanoun Khaled)
Main references (sources)	Islamic Perspectives on the Universal Declaration of Human Rights
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	



Course Description Form



1. Course Name: Analytical Chemistry	
2. Course Code: HECM3103	
3. Semester / Annual : Annual	
4. Description Preparation Date: 2026\3\30	
5. Available Attendance Forms: Regularity	
6. Number of Credit Hours (Total) / Number of Units (Total): Theory 90+ Practical 90\ 9	
7. Course administrator's name (mention all, if more than one name)	
Name: Assistant Professor Dr. Ahmed Jasim Muhammad	
Email: ahmed_j_twaij@hilla-unc.edu.iq	
8. Course Objectives	
Course Objectives	-Enabling the student to understand the fundamentals and concepts of analytical chemistry -Training students on the basic principles using laboratory equipment and various tools . -How to perform analytical calculations based on theoretical foundations . -Teaching the student practical applications and developing thinking and analytical skills to enable solving emerging problems . - Enabling the student to represent laboratory results practically and perform statistical operations on them.
9. Teaching and Learning Strategies	
Strategy	1 .Knowing and understanding the basics of analytical chemistry 2 .Distinguishing between qualitative and quantitative analysis 3 .Analyzing models qualitatively and quantitatively 4. Linking the relationship between analytical chemistry and other sciences in various fields

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3 theoretical 3 practical	Introduction to Analytical Chemistry, Analytical Chemistry and its importance, Types of scales in chemical analysis, hazard in analytical chemistry	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
2	3 theoretical 3 practical	Methods of quantitative analysis, Classical methods of analysis,	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
3	3 theoretical 3 practical	Some Basic Concepts, Electrolytes and Non-electrolytes, Solutions, Types of solutions	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
4	3 theoretical 3 practical	Acids, Bases and Salts, Arrhenius definitions of acids and bases, Definitions of acids and bases according to Brønsted-Lowry theory, Definitions of acids and bases according to Lewis	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
5	3 theoretical 3 practical	Salts with exam	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
6	3 theoretical 3 practical	Methods of Expressing Concentration of Solutions, Mass units mass and weight, Chemical formulas, Gram Formula weight	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
7	3 theoretical 3 practical	Formula concentration (Formality), F, Molar concentration (Molarity), M, Normal concentration (Normality), N	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
8	3 theoretical 3 practical	The relation between molarity (M) and normality, Molar concentration (Molality), m	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
9	3 theoretical 3 practical	Mole fraction, Percentage concentration, Titer expression of concentration	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
10	3 theoretical 3 practical	Part per million (ppm) and Part per billion (ppb), Density and specific gravity	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests



11	3 theoretical 3 practical	Chemical equilibrium, Law of mass action, Le Chatelier's Principle, Factors affecting the chemical equilibrium	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
12	3 theoretical 3 practical	Application of law of mass action to equilibrium systems, Dissociation of water, Equilibrium involving slightly soluble ionic solids	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
13	3 theoretical 3 practical	Ionization of weak acids and weak bases	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
14	3 theoretical 3 practical	Buffer solution, Types of buffer solution, Buffer capacity	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
15	3 theoretical 3 practical	Methods of Preparation Solutions and Chemical Calculations in Volumetric Titration Reactions	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
16	3 theoretical 3 practical	Standard and Standardized Solutions, Characteristics of standard solution	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
17		Half-year Break			
18	3 theoretical 3 practical	Primary standard materials, Chemical Calculations of Volumetric Titrations, Indicators, Indicator types	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
19	3 theoretical 3 practical	Calculations of acid-base titrations or neutralization titrations	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
20	3 theoretical 3 practical	Ionic product constant of water, Hydrogen-Ion Exponent (pH), Calculations of pH of acidic and basic solutions	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
21	3 theoretical 3 practical	Calculation of pHs of salts solutions, Calculations of pH of buffer solutions	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
22	3 theoretical 3 practical	Acid-Base Titration Curves with <u>exam</u> Titration of strong acid with strong base Titration of strong base with strong acid Titration of weak acid with strong base Titration of weak acid with weak base	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
23	3 theoretical 3 practical	Method of using adsorption indicator (Fajan's method) Titration curves for precipitation reactions	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests



24	3 theoretical 3 practical	Complex-Formation Titrations (Complexometry) Complex Compounds (Complexes), Coordination number, Ligand dentate	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
25	3 theoretical 3 practical	Titration processes employing EDTA	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
26	3 theoretical 3 practical	Complex formation titration curves of metal ions with EDTA only and not complex formation with the used solutions like Ca^{2+} and Mg^{2+} metal ions. Derivation of EDTA Titration curves with exam	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
27	3 theoretical 3 practical	Oxidation-Reduction Titrations, Some definitions Oxidation number	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
28	3 theoretical 3 practical	Balancing of oxidation-reduction equations, Electrochemical cells, Types of electrochemical cells	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
29	3 theoretical 3 practical	Anode and cathode, Electrode potential and Nernst equation,	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests
30	3 theoretical 3 practical	The Standard Hydrogen Electrode (SHE) Measurements of electrode potentials, Equivalence point potential	Analytical Chemistry	Lectures Theoretical and Practical	Oral and written tests

11.Course Evaluation

Distribution of the grade out of 100 according to the tasks assigned to the student: monthly exams + weekly oral exams + scientific activities

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	<i>Fundamental of analytical chemistry by skoog and west</i>
Main references (sources)	<i>Fundamental of analytical chemistry by skoog and west</i> <i>Analytical chemistry of Gary</i>
Recommended books and references (scientific journals, reports...)	Any book of fundamental of analytical chemistry
Electronic References, Websites	



Course Description Form



1. Course Name: Organic Chemistry

2. Course Code: HECM3102

3. Semester / Annual : Annual

4. Description Preparation Date: 2026\3\30

5. Available Attendance Forms: Regularity

6. Number of Credit Hours (Total) / Number of Units (Total): Theory 60+ Practical 90\ 7

7. Course administrator's name (mention all, if more than one name)

Name: Assistant Professor Dr. Ammar Ali Oda

Email: ammar_a_oda@hilla-unc.edu.iq

8. Course Objectives

Course Objectives

To enable the student to understand the fundamentals and concepts of organic chemistry

How to conduct chemical reactions based on theoretical principles

9. Teaching and Learning Strategies

Strategy

-Explanation and clarification

Lecture method

Model presentation method

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

1	2 theoretical 3 practical	Organic Chemistry Concepts: Alkanes	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
2	2 theoretical 3 practical	Alkane Reactions	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
3	2 theoretical 3 practical	Naming Alkanes	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
4	2 theoretical 3 practical	Structure Analysis and Free Rotation	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
5	2 theoretical 3 practical	Cycloalkanes	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
6	2 theoretical 3 practical	Cycloalkanes Structure	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
7	2 theoretical 3 practical	Preparation of Cycloalkanes	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
8	2 theoretical 3 practical	Cycloalkanes Reactions	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
9	2 theoretical 3 practical	Alkenes	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
10	2 theoretical 3 practical	Methods of Alkene Naming	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
11	2 theoretical 3 practical	Methods of Alkene Preparation	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
12	2 theoretical 3 practical	Exam	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
13	2 theoretical 3 practical	Alkene Reactions	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests



14	2 theoretical 3 practical	Spectroscopic and Chemical Characterization of Alkenes	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
15	2 theoretical 3 practical	General Review	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
16	2 theoretical 3 practical	Dienes	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
17	2 theoretical 3 practical	Alkynes – Overview	Organic Chemistry		
18	2 theoretical 3 practical	Exam	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
19	2 theoretical 3 practical	Methods of Alkyne Preparation	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
20	2 theoretical 3 practical	Alkyne Reactions	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
21	2 theoretical 3 practical	Aromatic Compounds/Benzene	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
22	2 theoretical 3 practical	Aromatic Conditions	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
23	2 theoretical 3 practical	Naming Benzene Derivatives	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
24	2 theoretical 3 practical	Substitution Reactions	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
25	2 theoretical 3 practical	Electrophile	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
26	2 theoretical 3 practical	Teaching Methods of Benzene Preparation	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests



27	2 theoretical 3 practical	Industrial and Laboratory	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
28	2 theoretical 3 practical	Examples and Solutions	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
29	2 theoretical 3 practical	Review of Key Topics	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests
30	2 theoretical 3 practical	Exam	Organic Chemistry	Lectures Theoretical and Practical	Oral and written tests

11.Course Evaluation

Distribution of the grade out of 100 according to the tasks assigned to the student: monthly exams + weekly oral exams + scientific activities

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	<i>Organic Chemistry by Professor Dr. Fahd Ali Hussein</i> <i>Organic Chemistry by Professor Dr. Mahmoud Shaker Maktoo</i>
Main references (sources)	Morreson
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	Arab Science Encyclopedia, Arab Book Forum



Course Description Form

1. Course Name: Inorganic Chemistry	
2. Course Code: HECM3101	
3. Semester / Annual : Annual	
4. Description Preparation Date: 2026\3\30	
5. Available Attendance Forms: Regularity	
6. Number of Credit Hours (Total) / Number of Units (Total): Theory 60\ 4	
7. Course administrator's name (mention all, if more than one name)	
Name: Asst. Lect. Hussein Ali Hussein	
Email: hussein_ali_hussein@hilla-unc.edu.iq	
8. Course Objectives	
Course Objectives	•The student will learn the most important theoretical foundations of atomic structure, its laws and how to interpret them. •The student will understand the nature of electromagnetic radiation and the phenomena explained by scientists, such as the photoelectric effect. •The student will learn some basic laws of theoretical inorganic chemistry and their applications. •The student will be able to understand the nature of bonding between different compounds • The student will understand the concept of hybridization, its different types, and the conditions under which it occurs.
9. Teaching and Learning Strategies	
Strategy	1 .Developing students' cognitive skills through questions and answers.



- 2 .Providing opportunities for students to present their ideas through discussions of the lecture with their professor and classmates.
- 3 .Applying what they have learned through homework and quizzes.
4. The teaching methods include lectures, discussions, motivational activities and brainstorming.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2 theoretical	The electron, the nature of radiation.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
2	2 theoretical	Electromagnetic radiation.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
3	2 theoretical	Properties of waves.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
4	2 theoretical	Energy levels and orbitals (d and p).	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
5	2 theoretical	State symbol designation for multi-electron atoms.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
6	2 theoretical	Electron shielding.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
7	2 theoretical	Atomic, ionic, and covalent radii.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
8	2 theoretical	Ionization energy, electron affinity, electronegativity.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests



9	2 theoretical	Magnetic properties.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
10	2 theoretical	Ionic lattice energy.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
11	2 theoretical	Ionic lattice energy.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
12	2 theoretical	Crystal lattice structure.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
13	2 theoretical	Lewis structures of polyatomic molecules.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
14	2 theoretical	Resonance.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
15	2 theoretical	Molecular geometry and electron pair repulsion outer shells.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
16	2 theoretical	Molecular geometry and electron pair repulsion outer shells.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
17	2 theoretical	Molecular symmetry.	Inorganic Chemistry	Lectures Theoretical	
18	2 theoretical	Molecular orbital configuration. Molecular orbital energy level	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
19	2 theoretical	diagram for diatomic molecules.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
20	2 theoretical	Molecular orbital energy level diagram for triatomic molecules.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
21	2 theoretical	Hybridization.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests



22	2 theoretical	Hybridization.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
23	2 theoretical	Method for determining the structure of some simple molecules.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
24	2 theoretical	Method for determining the structure of some simple molecules.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
25	2 theoretical	Bonding in some organic molecules.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
26	2 theoretical	Activity Radioactive.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
27	2 theoretical	Radioactive series	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
28	2 theoretical	Alpha rays, beta rays.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
29	2 theoretical	Gamma rays, cosmic rays.	Inorganic Chemistry	Lectures Theoretical	Oral and written tests
30	2 theoretical	Radiation dose.	Inorganic Chemistry	Lectures Theoretical	Lectures Theoretical

11.Course Evaluation

The grade distribution out of 100 is based on the tasks assigned to the student:

1. Midterm exam (theory) = 50%

2. Final exam (theory) = 50%

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	<i>Modern Inorganic Chemistry - Part 1 / Dr. Basim Mohammed Saadi</i>
Main references (sources)	Inorganic Chemistry for Early Stages / Thanaa Al-Hassani
Recommended books and references (scientific journals, reports...)	Inorganic Chemistry - Part 1 (Dr. Numan Al-Nuaimi and his group) Inorganic Chemistry / Dr. Sajid Mahmoud Latif Inorganic Chemistry / Dr. Essam Jirjis





Course Description Form



1. Course Name: Biology

2. Course Code: HECM3104

3. Semester / Annual : Annual

4. Description Preparation Date: 2026\3\30

5. Available Attendance Forms: Regularity

6. Number of Credit Hours (Total) / Number of Units (Total): Theory 30+ Practical 60\ 4

7. Course administrator's name (mention all, if more than one name)

Name: Professor Dr. Fadil sami zgair

Email: fadil_sami@hilla-unc.edu.iq

8. Course Objectives

Course Objectives	.1Introducing the importance of studying theoretical biology. .2Developing scientific skills. 3. Cultivating intellectual knowledge.
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9. Teaching and Learning Strategies

Strategy	Preparing theoretical and practical lectures and the necessary projector for explaining the prescribed scientific material. Preparing various scientific reports related to the course material, scientific research, and discussions.
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10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

1	1 theoretical 2 practical	- Introduction to Biology - An Overview of Biology - A Historical Overview of General Biology - The Evolution of Biology - The Importance of Biology	Biology	Lectures Theoretical and Practical	Oral and written tests
2	1 theoretical 2 practical	- Branches of Biology - Characteristics of Life - Definition of Characteristics of Life - The Main Structure of Living Matter - Classification of Organisms - Historical Stages	Biology	Lectures Theoretical and Practical	Oral and written tests
3	1 theoretical 2 practical	- Classification Systems - Principles of Plant and Animal Classification - The Concept of Species	Biology	Lectures Theoretical and Practical	Oral and written tests
4	1 theoretical 2 practical	- Reproduction and Growth - Reproduction and Growth in Plants	Biology	Lectures Theoretical and Practical	Oral and written tests
5	1 theoretical 2 practical	- Asexual Reproduction - Sexual Reproduction - Reproduction and Growth in Animals	Biology	Lectures Theoretical and Practical	Oral and written tests
6	1 theoretical 2 practical	- Hormonal Coordination	Biology	Lectures Theoretical and Practical	Oral and written tests
7	1 theoretical 2 practical	- Introduction - Coordination in Animals - Hormonal Coordination	Biology	Lectures Theoretical and Practical	Oral and written tests
8	1 theoretical 2 practical	- Introduction - Coordination in Plants - Hormonal Coordination	Biology	Lectures Theoretical and Practical	Oral and written tests
9	1 theoretical 2 practical	- Introduction - Coordination in Animals - Evolution	Biology	Lectures Theoretical and Practical	Oral and written tests
10	1 theoretical 2 practical	- Theories of Evolution	Biology	Lectures Theoretical and Practical	Oral and written tests
11	1 theoretical 2 practical	- Lamarckian Theory	Biology	Lectures Theoretical and Practical	Oral and written tests
12	1 theoretical 2 practical	- Evolution - Darwinian Theory	Biology	Lectures Theoretical and Practical	Oral and written tests
13	1 theoretical 2 practical	- Evolution - Evolution of Vertebrates - Evolution of Lower Animals	Biology	Lectures Theoretical and Practical	Oral and written tests



14	1 theoretical 2 practical	- The Biological Clock - Types of Biological Rhythms - Location of the Biological Clock	Biology	Lectures Theoretical and Practical	Oral and written tests
15	1 theoretical 2 practical	- Behavior of Organisms - The Nervous System and Behavior	Biology	Lectures Theoretical and Practical	Oral and written tests
16	1 theoretical 2 practical	- Behavior Innate and Learned - Orientation in Time and Space Acquired Behavior: Group Movement and Migration Routine and Life Clock	Biology	Lectures Theoretical and Practical	Oral and written tests
17	1 theoretical 2 practical	- Hierarchical Dominance in Animal Groups - Examples of Living Behavior	Biology		
18	1 theoretical 2 practical	- Ecology	Biology	Lectures Theoretical and Practical	Oral and written tests
19	1 theoretical 2 practical	- Some Concepts about the Environment - Ecology and its Pollution Sources The Ecosystem and its Components	Biology	Lectures Theoretical and Practical	Oral and written tests
20	1 theoretical 2 practical	- The Abiotic Environment - The Biogeochemical Environment	Biology	Lectures Theoretical and Practical	Oral and written tests
21	1 theoretical 2 practical	- Energy Cycles - The Flow (Transfer) of Energy	Biology	Lectures Theoretical and Practical	Oral and written tests
22	1 theoretical 2 practical	- The Food Chain - Food Chains and the Food Web	Biology	Lectures Theoretical and Practical	Oral and written tests
23	1 theoretical 2 practical	- Aquatic and Terrestrial Biomes - Relationships Between Organisms - Positive Relationships - Negative Relationships	Biology	Lectures Theoretical and Practical	Oral and written tests
24	1 theoretical 2 practical	- A Detailed Study of One Animal Species from Each Phylum	Biology	Lectures Theoretical and Practical	Oral and written tests
25	1 theoretical 2 practical	- Environmental Pollution in All Its Forms - Population Problems and the Relationship Between Humans and the Environment	Biology	Lectures Theoretical and Practical	Oral and written tests
26	1 theoretical 2 practical	- Air Pollution - Water Pollution - Soil Pollution	Biology	Lectures Theoretical and Practical	Oral and written tests



27	1 theoretical 2 practical	- Condensing the Vocabulary of Plant Classification Allow for the Introduction of New Vocabulary	Biology	Lectures Theoretical and Practical	Oral and written tests
28	1 theoretical 2 practical	- A Simplified Study of Some Physiological Aspects in Plants, For example: Water Relationships, Photosynthesis	Biology	Lectures Theoretical and Practical	Oral and written tests
29	1 theoretical 2 practical	- A Study of Some Physiological Aspects Plant respiration: A simplified study of microorganisms	Biology	Lectures Theoretical and Practical	Oral and written tests
30	1 theoretical 2 practical	fungi, and bacteria; and an examination of environmental adaptations and their effects on plants.	Biology	Lectures Theoretical and Practical	Oral and written tests

11.Course Evaluation

Distribution of the grade out of 100 according to the tasks assigned to the student: monthly exams + weekly oral exams + scientific activities

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	<i>Biology book</i>
Main references (sources)	Fundamentals of Theoretical Biology
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	Arab Science Encyclopedia, Arab Book Forum



Course Description Form

1. Course Name: Foundations of Education					
2. Course Code: HECM3109					
3. Semester / Annual : Annual					
4. Description Preparation Date: 2026\4\1					
5. Available Attendance Forms: Regularity					
6. Number of Credit Hours (Total) / Number of Units (Total): Theory 60\ 4					
7. Course administrator's name (mention all, if more than one name)					
Name: Asst. Lect. Dhafer Nasser Hussein					
Email: dafer_naser@hilla-unc.edu.iq					
8. Course Objectives					
Course Objectives		The subject aims to introduce students to the foundations and concepts of education, and to develop their abilities to understand and analyze educational issues and principles in the educational reality.			
9. Teaching and Learning Strategies					
Strategy		Various teaching methods are used in the subject, such as lecturing, discussion, questioning, cooperative learning, and brainstorming, along with the use of modern educational tools.			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method



1	2 theoretical	The Concept of Education	Foundations Education	Lectures Theoretical	Oral and written tests
2	2 theoretical	Education in its Individual Sense	Foundations Education	Lectures Theoretical	Oral and written tests
3	2 theoretical	The Historical Foundations of Education	Foundations Education	Lectures Theoretical	Oral and written tests
4	2 theoretical	The Importance and Study of the Historical Foundations of Education	Foundations Education	Lectures Theoretical	Oral and written tests
5	2 theoretical	The Function of Education	Foundations Education	Lectures Theoretical	Oral and written tests
6	2 theoretical	The Difference Between Education and Instruction	Foundations Education	Lectures Theoretical	Oral and written tests
7	2 theoretical	Principles of Education	Foundations Education	Lectures Theoretical	Oral and written tests
8	2 theoretical	Characteristics of Education	Foundations Education	Lectures Theoretical	Oral and written tests
9	2 theoretical	The Importance of Education	Foundations Education	Lectures Theoretical	Oral and written tests
10	2 theoretical	Education in Primitive Societies	Foundations Education	Lectures Theoretical	Oral and written tests
11	2 theoretical	The Most Important Characteristics and Features of Education in Primitive Societies	Foundations Education	Lectures Theoretical	Oral and written tests
12	2 theoretical	Education in Mesopotamian Civilization	Foundations Education	Lectures Theoretical	Oral and written tests
13	2 theoretical	Education in the Nile Valley	Foundations Education	Lectures Theoretical	Oral and written tests



14	2 theoretical	The Goals of Ancient Egyptian Education	Foundations Education	Lectures Theoretical	Oral and written tests
15	2 theoretical	Education in Chinese Civilization	Foundations Education	Lectures Theoretical	Oral and written tests
16	2 theoretical	The School System in Chinese Education	Foundations Education	Lectures Theoretical	Oral and written tests
17	2 theoretical	The Goals of Chinese Education	Foundations Education	Lectures Theoretical	
18	2 theoretical	Greek Education	Foundations Education	Lectures Theoretical	Oral and written tests
19	2 theoretical	The Educational System in Sparta	Foundations Education	Lectures Theoretical	Oral and written tests
20	2 theoretical	Reasons for the Failure of the Educational System in Sparta	Foundations Education	Lectures Theoretical	Oral and written tests
21	2 theoretical	The Educational System in Athens	Foundations Education	Lectures Theoretical	Oral and written tests
22	2 theoretical	The Goals of Christian Education	Foundations Education	Lectures Theoretical	Oral and written tests
23	2 theoretical	Education Before Islam	Foundations Education	Lectures Theoretical	Oral and written tests
24	2 theoretical	The Definition of Islamic Education	Foundations Education	Lectures Theoretical	Oral and written tests
25	2 theoretical	Stages of Islamic Education	Foundations Education	Lectures Theoretical	Oral and written tests
26	2 theoretical	Methods of Islamic Education	Foundations Education	Lectures Theoretical	Oral and written tests



27	2 theoretical	Sources of Islamic Education	Foundations Education	Lectures Theoretical	Oral and written tests
28	2 theoretical	The Foundations of Religious Education	Foundations Education	Lectures Theoretical	Oral and written tests
29	2 theoretical	Prominent Figures of Arab-Islamic Thought	Foundations Education	Lectures Theoretical	Oral and written tests
30	2 theoretical	Imam Ja'far ibn Muhammad al-Sadiq	Foundations Education	Lectures Theoretical	Lectures Theoretical

11.Course Evaluation

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

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	Adas, Abdul Rahman (2000). Foundations Education. Amman: Dar Al-Fikr. - Al-Laqqani, Ahmed Hussein (2001). Princip of Education. Cairo: Alam Al-Kutub.
Recommended books and references (scientific journals, reports...)	Educational Psychology Al-Atoum, Adnan Yousef (2010). Education Psychology. Amman: Dar Al-Masirah.
Electronic References, Websites	Al-Maktaba Al-Shamela



Course Description Form

1. Course Name: Educational Psychology	
2. Course Code: HECM3108	
3. Semester / Annual : Annual	
4. Description Preparation Date: 2026\4\1	
5. Available Attendance Forms: Regularity	
6. Number of Credit Hours (Total) / Number of Units (Total): Theory 60\ 4	
7. Course administrator's name (mention all, if more than one name)	
Name: Asst. Lect. Dhafer Nasser Hussein	
Email: dafer_naser@hilla-unc.edu.iq	
8. Course Objectives	
Course Objectives	1. To understand the concept of educational psychology and its importance in the education process. 2. To understand the developmental characteristics of learners at different stages. 3. To analyze learning theories and their applications in the classroom. 4. To develop the ability to interpret learner behavior in educational situations. 5. To acquire classroom management skills and the ability to address individual differences. 6. To understand motivation and methods for enhancing it among students. 7. To develop educational assessment and evaluation skills. 8. To apply psychological principles to improve the teaching and learning process.



9. To foster positive attitudes towards the teaching profession.					
10. To develop scientific thinking in addressing educational problems.					
9. Teaching and Learning Strategies					
Strategy	1. Interactive Lecture: Presenting fundamental concepts while engaging students through questions and discussion. 2. Cooperative Learning: Dividing students into groups to work on shared tasks and develop communication skills. 3. Brainstorming: Presenting an educational problem and encouraging students to generate multiple solutions. 4. Problem-Solving: Training students to analyze real-life educational situations and find scientific solutions. 5. Case Study : Presenting and analyzing real-life cases (behavioral or educational) according to psychological theories. 6. Activity-Based Learning: Engaging students in practical activities to reinforce theoretical concepts. 7. Classroom Dialogue and Discussion: Developing critical thinking and exchanging opinions among students. 8. Self-Learning: Assigning readings and research to students to promote independence in learning. 9. E-Learning: Using digital tools and presentations to support learning. 10. Continuous (Formative) Assessment: Monitoring student progress through quizzes, assignments, and participation.				
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method



1	2 theoretical	Understanding Science Definition of Psychology	Educational Psychology	Lectures Theoretical	Oral and written tests
2	2 theoretical	The Difference Between Learning and Teaching	Educational Psychology	Lectures Theoretical	Oral and written tests
3	2 theoretical	Definition of Educational Psychology	Educational Psychology	Lectures Theoretical	Oral and written tests
4	2 theoretical	Why Study Educational Psychology	Educational Psychology	Lectures Theoretical	Oral and written tests
5	2 theoretical	Characteristics of the Teaching Profession	Educational Psychology	Lectures Theoretical	Oral and written tests
6	2 theoretical	Importance of Educational Psychology	Educational Psychology	Lectures Theoretical	Oral and written tests
7	2 theoretical	Objectives of Educational Psychology And its Relationship to Other Sciences	Educational Psychology	Lectures Theoretical	Oral and written tests
8	2 theoretical	Characteristics of the Desired Teacher	Educational Psychology	Lectures Theoretical	Oral and written tests
9	2 theoretical	Factors Affecting the Effectiveness of the Educational Process	Educational Psychology	Lectures Theoretical	Oral and written tests
10	2 theoretical	Problems Identified by UNESCO for Education Iraq and Some Arab Countries	Educational Psychology	Lectures Theoretical	Oral and written tests
11	2 theoretical	Motivation	Educational Psychology	Lectures Theoretical	Oral and written tests
12	2 theoretical	Types of Motivation	Educational Psychology	Lectures Theoretical	Oral and written tests
13	2 theoretical	Educational Functions of Motivation	Educational Psychology	Lectures Theoretical	Oral and written tests



14	2 theoretical	Methods Used to Stimulate Student Motivation in the Classroom Memory - Definition - Types	Educational Psychology	Lectures Theoretical	Oral and written tests
15	2 theoretical	Inson-Shifrin Model	Educational Psychology	Lectures Theoretical	Oral and written tests
16	2 theoretical	Factors Affecting an Individual's Ability to Remember	Educational Psychology	Lectures Theoretical	Oral and written tests
17	2 theoretical	Forgetting - The Concept of Forgetting - Theory Explaining	Educational Psychology	Lectures Theoretical	
18	2 theoretical	Forgetting Factors Affecting Forgetting	Educational Psychology	Lectures Theoretical	Oral and written tests
19	2 theoretical	Transfer of Training	Educational Psychology	Lectures Theoretical	Oral and written tests
20	2 theoretical	Modern Theories of Transfer of Training Feedback	Educational Psychology	Lectures Theoretical	Oral and written tests
21	2 theoretical	Types of Feedback Learning - Conditions for Good Learning	Educational Psychology	Lectures Theoretical	Oral and written tests
22	2 theoretical	Learning Theories - Trial and Error Learning	Educational Psychology	Lectures Theoretical	Oral and written tests
23	2 theoretical	Applications of Theory Thorndike	Educational Psychology	Lectures Theoretical	Oral and written tests
24	2 theoretical	Classical Conditioning Theory	Educational Psychology	Lectures Theoretical	Oral and written tests
25	2 theoretical	Concepts and Phenomena in Classical Learning	Educational Psychology	Lectures Theoretical	Oral and written tests
26	2 theoretical	Educational Applications of Pavlov's Theory	Educational Psychology	Lectures Theoretical	Oral and written tests



27	2 theoretical	Gestalt Theory	Educational Psychology	Lectures Theoretical	Oral and written tests
28	2 theoretical	Basic Concepts of Gestalt Theory	Educational Psychology	Lectures Theoretical	Oral and written tests
29	2 theoretical	Insight in Gestalt Theory	Educational Psychology	Lectures Theoretical	Oral and written tests
30	2 theoretical	Educational Applications of Gestalt Theory	Educational Psychology	Lectures Theoretical	Lectures Theoretical

11.Course Evaluation

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

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Educational Psychology – Fouad Abu Hatab Educational Psychology – Emad Abdel Rah Zaghloul
Main references (sources)	Educational Psychology and its Applications Muhammad Jassim Muhammad
Recommended books and references (scientific journals, reports...)	Educational Psychology and its Applications Muhammad Al-Bili
Electronic References, Websites	Al-Maktaba Al-Shamela



Course Description Form

1. Course Name: Mathematics	
2. Course Code: HECM3106	
3. Semester / Annual : Annual	
4. Description Preparation Date: 2026\4\1	
5. Available Attendance Forms: Regularity	
6. Number of Credit Hours (Total) / Number of Units (Total): Theory 30\ 2	
7. Course administrator's name (mention all, if more than one name)	
Name: Dr. Hussein abdel wasi	
Email: hussein_abdwasi@hilla-unc.edu.iq	
8. Course Objectives	
Course Objectives	- Identifying, defining, and understanding the properties of elementary functions - Mastering essential differentiation skills - Mastering essential integration skills - Learning techniques of integration
9. Teaching and Learning Strategies	
Strategy	1. Interactive Lecture: Presenting fundamental concepts while engaging students through questions and discussion. 2. Cooperative Learning: Dividing students into groups to work on shared tasks and develop communication skills. 3. Brainstorming: Presenting an educational problem and encouraging students to generate multiple solutions.



4. Problem-Solving: Training students to analyze real-life educational situations and find scientific solutions.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1theoretical	Real Number	Mathematic	Lectures Theoretical	Oral and written tests
2	1theoretical	Real Number	Mathematic	Lectures Theoretical	Oral and written tests
3	1theoretical	Inequality	Mathematic	Lectures Theoretical	Oral and written tests
4	1theoretical	Inequality	Mathematic	Lectures Theoretical	Oral and written tests
5	1theoretical	functions	Mathematic	Lectures Theoretical	Oral and written tests
6	1theoretical	functions	Mathematic	Lectures Theoretical	Oral and written tests
7	1theoretical	Limits	Mathematic	Lectures Theoretical	Oral and written tests
8	1theoretical	Limits	Mathematic	Lectures Theoretical	Oral and written tests
9	1theoretical	Derivative	Mathematic	Lectures Theoretical	Oral and written tests
10	1theoretical	Derivative	Mathematic	Lectures Theoretical	Oral and written tests



11	1theoretical	Derivative of trigonometric	Mathematic	Lectures Theoretical	Oral and written tests
12	1theoretical	Derivative of trigonometric	Mathematic	Lectures Theoretical	Oral and written tests
13	1theoretical	Derivative of logarithm functions	Mathematic	Lectures Theoretical	Oral and written tests
14	1theoretical	Derivative of logarithm functions	Mathematic	Lectures Theoretical	Oral and written tests
15	1theoretical	Derivative inverse of trigonometric functi	Mathematic	Lectures Theoretical	Oral and written tests
16	1theoretical	Derivative inverse of trigonometric functi	Mathematic	Lectures Theoretical	Oral and written tests
17	1theoretical	1 exam	Mathematic	Lectures Theoretical	
18	1theoretical	Notation about summation	Mathematic	Lectures Theoretical	Oral and written tests
19	1theoretical	Notation about summation	Mathematic	Lectures Theoretical	Oral and written tests
20	1theoretical	Integral	Mathematic	Lectures Theoretical	Oral and written tests
21	1theoretical	Integral	Mathematic	Lectures Theoretical	Oral and written tests
22	1theoretical	Methods of integration	Mathematic	Lectures Theoretical	Oral and written tests
23	1theoretical	Exam 2	Mathematic	Lectures Theoretical	Oral and written tests



24	1theoretical	Integral of trigonometric functions	Mathematic	Lectures Theoretical	Oral and written tests
25	1theoretical	Integral of trigonometric functions	Mathematic	Lectures Theoretical	Oral and written tests
26	1theoretical	integral of logarithm functions	Mathematic	Lectures Theoretical	Oral and written tests
27	1theoretical	integral of logarithm functions	Mathematic	Lectures Theoretical	Oral and written tests
28	1theoretical	Matrix	Mathematic	Lectures Theoretical	Oral and written tests
29	1theoretical	Determent of matrix	Mathematic	Lectures Theoretical	Oral and written tests
30	1theoretical	Determent of matrix	Mathematic	Lectures Theoretical	Lectures Theoretical

11.Course Evaluation

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

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Schaum s outline in linear algebra
Main references (sources)	Schaum s outline in statistics
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	https://ncert.nic.in/textbook/pdf/hemh102.pdf



Course Description Form

1. Course Name:	
"Arabic language".	
2. Course Code:	
HECM3210	
3. Semester:	
"2025 / 2026 (Annual)"	
4. Description Preparation Date:	
15 / 11 / 2025	
5. Available Attendance Forms:	
50/2	
6. Number of Credit Hours (Total) / Number of Units (Total)	
7. Course administrator's name (mention all, if more than one name)	
name:Dr. Ali abbas Gmail: dralialzmeli@gmail.com. 	
8. Course Objectives	
Course Objectives	First: Cognitive Objectives The objectives of the Arabic language course are as follows:

1. Introducing students to the fundamental rules of correct spelling to avoid mistakes in expression, aligning with their educational level.
2. Understanding the basic grammar rules necessary for their future studies and professional life.
3. Applying these rules easily without the need for rote memorization.
4. Identifying simple spelling and linguistic errors to avoid them.
5. Developing the ability to express oneself correctly without relying on others.
6. Recognizing the importance of the Arabic language in personal and professional life, enhancing vocabulary, and addressing common errors and challenges.

Secondly: Skill-based Objectives



9. Teaching and Learning Strategies

Strategy	1. Explaining the basic rules of writing in the Arabic language. 2. Applying linguistic knowledge skillfully and effortlessly. 3. Analyzing linguistic structures and simple texts used in daily life. 4. Demonstrating self-confidence and the ability to express oneself easily. 5. Addressing minor personal errors.
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10. Course Structure

No.	Hours	Required Learr	Unit or subject name	Learning method	Evaluation
		Outcomes			method
First week			مقدمة تعريفية بعلم الإملاء ووضعه ونشأته وتطوره	طريقةلقاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة
Second week			الهمزة الأولية	طريقةلقاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة
Third week			1 الهمزة المتوسطة	طريقةلقاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة



Fourth week		2	الهمزة المتوسطة ●	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة	2
Fifth weeks		2	الهمزة المتطرفة	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة	2
Sixth week		2	الهمزة المتطرفة وتنوين الفتح ●	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة	2
seventh week		2	التاء المربوطة والتاء المبسوطة ●	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة	2
Ninth week		2	انوار الرحمن في آيات القرآن (دراسة قرآنية)	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة	2
Tenth week		2	امتحان نصف الفصل	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة	2
Eleventh weeks		2	الألف المقصور	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة	2
Twelfth week		2	حروف التثنية والفتحة	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة	2



thirteenth week			1 العدد والمعدود	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة	2
Fourteenth Week			2 العدد والمعدود	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة	2
Fifteenth Week			دراسة سورة الفاتحة باساليب مجازية	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة	2
			دلالة الاستعاذة قبل البسملة	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة	2



1. Course Evaluation

: درجة الفصل الدراسي (200) توزع بالشكل الآتي

25 : الفصل الاول

20 : الامتحان النصف فصلي

5 : النشاط و الحضور

25 : الفصل الثانی

20 : الامتحان النصف فصلي

5: النشاط و الحضور

50 : الامتحان النهائي

12 Learning and Teaching Resources

Required textbooks (methodology, if any)

Key references (sources)

الإمام الفريد، نعوم جرجيس زراير، مكتبة اللغة العربية،
بغداد- العراق، ط6، 2017م

Recommended books and references
(scientific journals, reports...)

المالء الواضح، عبد المجيد النعيمي، مكتبة دار المتنبي، بغداد- العراق، ط، 3، 1967م.

Electronic references, websites

شبكة اللوكة موقع فصيح الإللكي مكتبة نرجس ونية ونية

Course Dev

● المكتبة الوقفية الإللي ونية مكتبة نور الاليكترونية

• • • • • • •	خطه تطوير المقرر الدراسي
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elopment Plan



Course Description Form

1. Course Name			
English Language			
2. Course Code			
HECM3211			
3. Semester / Year			
Year			
4. Description Preparation Date			
2/2/2026			
5. Available Attendance Forms			
Theoretical			
6. Number of Credit Hours (Total) / Number of Units (Total):			
Units		2	Hours (Theoretical)
			2
7. Course administrator's name (mention all, if more than one name)			
Assist. Lech. Ahmed Riyadh Marzoug			
8. Course Objectives			
Course Objectives	Cognitive Objectives		
	- Develop students' ability to use English in academic and chemistry-related situations. - Acquire essential chemistry vocabulary and laboratory terminology. - Improve reading comprehension of introductory scientific texts. - Develop speaking confidence through discussions, pair work, and presentations. - Enable students to understand and describe basic chemical equations and branches of chemistry.		
	Specific Skill-Based Objectives		
	- Read simple scientific passages accurately. - Use chemistry terminology correctly. - Participate in laboratory and classroom dialogues. - Deliver short presentations in English. - Communicate politely in academic situations.		
9. Teaching and Learning Strategies			



Strategy

Teaching and Learning Strategies

- PowerPoint-supported lectures
- Interactive discussions
- Vocabulary building exercises
- Reading comprehension
- Pair work
- Role play
- Student presentations
- Pronunciation practice
- Homework assignments
- Continuous quizzes

Assessment Methods

Quizzes: Conducting quick daily/frequent quizzes.

Monthly Exams: Administering monthly examinations.

Term & Final Exams: Conducting midterm and final examinations.



10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1		Introduction to English for Chemistry	Students achieve the intended learning outcome related to the lesson.	Theoretical Lectures Using PDF and PowerPoint	Daily Exams / Quizzes Term Exams Mid-Year Exams Final Exams
2		Importance of English in Science	Students achieve the intended learning outcome related to the lesson.		
3		Chemistry Vocabulary I	Students achieve the intended learning outcome related to the lesson.		
4		Chemistry Vocabulary II	Students achieve the intended learning outcome related to the lesson.		
5		Laboratory Vocabulary	Students achieve the intended learning outcome related to the lesson.		
6		Reading: Chemistry and Daily Life	Students achieve the intended learning outcome related to the lesson.		
7		Speaking Activity	Students achieve the intended learning outcome related to the lesson.		
8		Review & Quiz	Students achieve the intended learning outcome related to the lesson.		
9		Chemical Reactions	Students achieve the intended learning outcome related to the lesson.		
10		Reading Chemical Equations	Students achieve the intended learning outcome related to the lesson.		
11		Equation Symbols	Students achieve the intended learning outcome related to the lesson.		
12		Reaction Verbs	Students achieve the intended learning outcome related to the lesson.		
13		Branches of Chemistry	Students achieve the intended learning outcome related to the lesson.		
14		Applications of Chemistry	Students achieve the intended learning outcome related to the lesson.		
15		Mid-term Review	Students achieve the intended learning outcome related to the lesson.		
16		Mid-year Examination	Students achieve the intended		



			learning outcome related to the lesson.		
17		Present Simple	Students achieve the intended learning outcome related to the lesson.		
18		Present Continuous	Students achieve the intended learning outcome related to the lesson.		
19		Past Simple	Students achieve the intended learning outcome related to the lesson.		
20		Scientific Communication	Students achieve the intended learning outcome related to the lesson.		
21		Laboratory Dialogues	Students achieve the intended learning outcome related to the lesson.		
22		Role Play Activities	Students achieve the intended learning outcome related to the lesson.		
23		Student Presentations I	Students achieve the intended learning outcome related to the lesson.		
24		Student Presentations II	Students achieve the intended learning outcome related to the lesson.		
25		Reading Comprehension	Students achieve the intended learning outcome related to the lesson.		
26		Vocabulary Revision	Students achieve the intended learning outcome related to the lesson.		
27		Interactive Speaking	Students achieve the intended learning outcome related to the lesson.		
28		General Revision	Students achieve the intended learning outcome related to the lesson.		
29		Final Review	Students achieve the intended learning outcome related to the lesson.		
30		Final Examination	Students achieve the intended learning outcome related to the lesson.		



11. Course Evaluation

- Attendance and commitment: 10%
- Daily quizzes and classroom activities: 20%
- Homework and student presentations: 20%
- Final examination: 50%

12. Learning and Teaching Resources

Required Textbooks	Required Textbook: Instructor-prepared English for Chemistry lectures. Core References: 1. Murphy, R. English Grammar in Use. 2. Oxford English for Careers: Science. 3. Introductory Chemistry references and scientific articles. Electronic Resources: Cambridge Dictionary, Oxford Learner's Dictionary, British Council LearnEnglish.
Core References	
Recommended Supplementary Reading (Scientific Journals, Reports, etc.)	Scientific Journals and Websites
Electronic Resources and Websites	Research-Specific Websites
1. Course Improvement Plan	• Update scientific vocabulary annually. • Increase student presentations and pair work. • Integrate authentic chemistry texts. • Expand use of multimedia resources. • Enhance formative assessment and speaking activities.



نموذج وصف المقرر

1. Course Name: Computer Science

.1

Course Code HECM3105

.2

3. Semester / Year: Annual

.3

1. Date of preparation of this description: 1/12/2025

.4

1. Available attendance formats: Weekly lecture, classroom, and laboratory.

.5

1. Total number of study hours/

.6

$2 \times 30 \text{ weeks} = 60 \text{ hours per year}$

1. Course Coordinator's Name:

.7

Asst. Lecturer Mohammed Ali Abees



1. Course Objectives

Learn about: -

- 1- Viruses and methods of protection against them
- 2- The Windows operating system
- 3- The Microsoft software suite

Course Objectives

1. Teaching and Learning Strategies

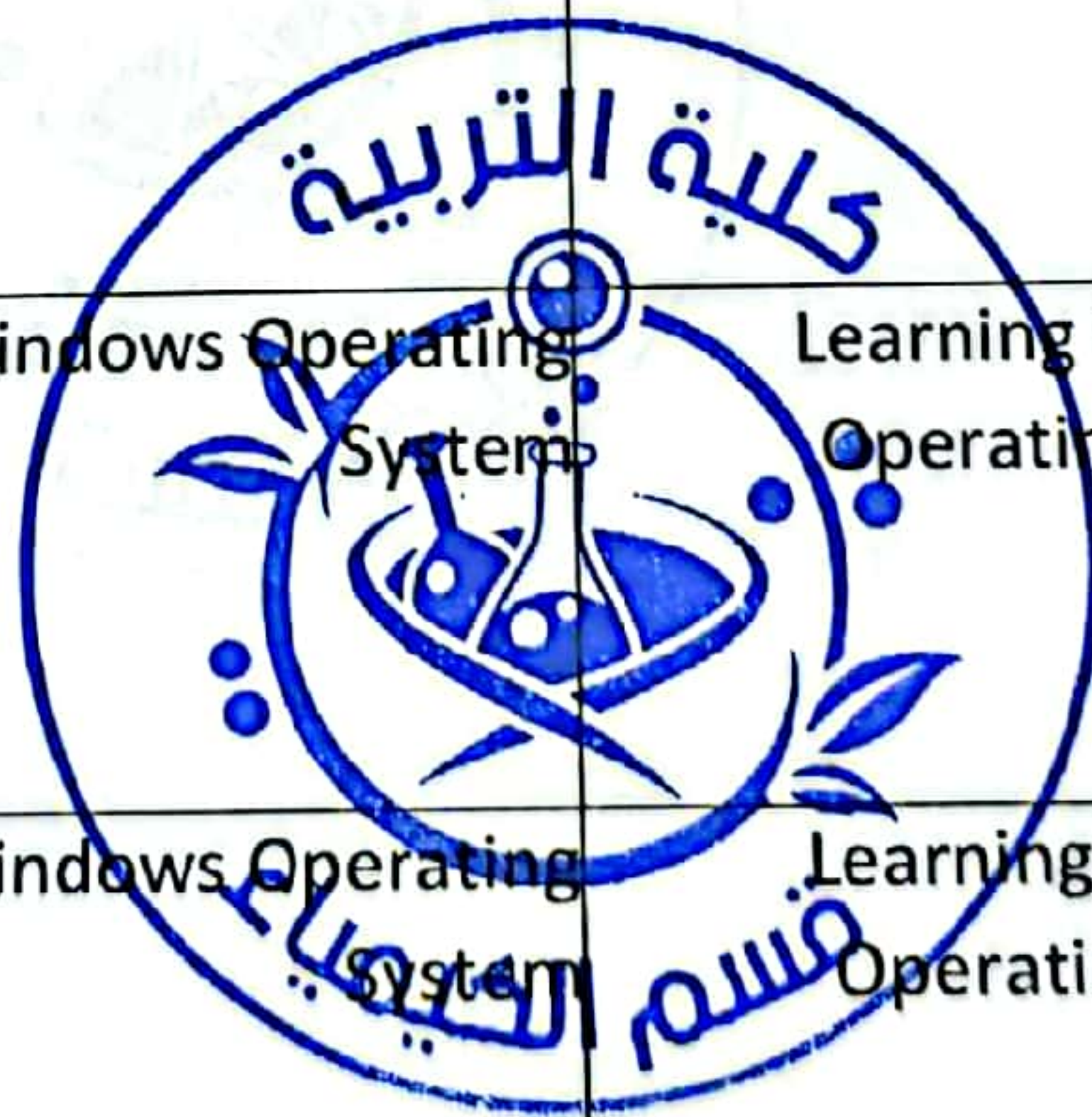
الاستراتيجية

- Meticulous lesson planning
- Motivating and encouraging learners
- Addressing individual differences and fostering participation among all students
- Enabling students to acquire knowledge and understanding of Excel and PowerPoint programs
- Conducting practical and theoretical assessments, reports, and homework assignments

Course Structure

Evaluation Method	Learning method	Unit or Topic Name	Required learning outcomes	Watches	The Week
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Introduction to Computer Viruses	Introduction to Computer Fundamentals and Components	2	1
Daily quizzes Homework Class participation Attendance	Whiteboard and Data Show with student computer usage	Methods of Virus Removal	Teaching Computer Fundamentals and Components	2	2

Monthly exams					
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Ways to get rid of viruses	Teaching Computer Fundamentals and Components	2	3
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Ways to get rid of viruses	Teaching Computer Fundamentals and Components	2	4
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Ways to get rid of viruses	Teaching Computer Fundamentals and Components	2	5
Daily quizzes Homework Class participation Attendance Monthly exams	Theoretical and practical exam on the computer	Ways to get rid of viruses	Teaching Computer Fundamentals and Components	2	6
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	review	Review	2	7
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	First Monthly Exam	First Monthly Exam	2	8
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Review of Windows Operating System	Introduction to Windows Operating System	2	9
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Windows Operating System	Learning Windows Operating System	2	10
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Windows Operating System	Learning Windows Operating System	2	11



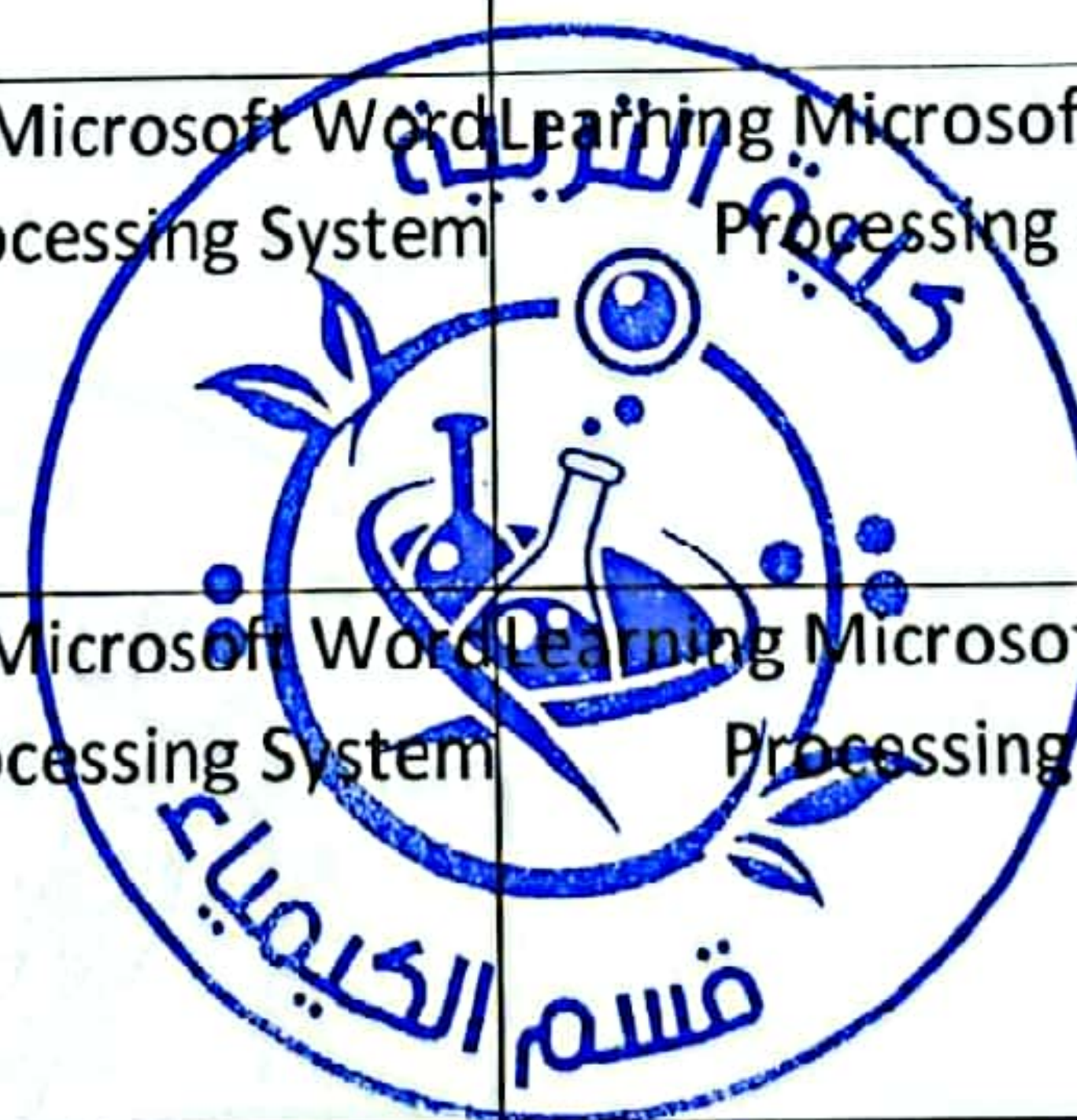
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Windows Operating System	Learning Windows Operating System	2	12
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Windows Operating System	Learning Windows Operating System	2	13
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Review	Review	2	14
امتحانات شهرية	Theoretical and practical exam on the computer	Second Monthly Exam	Second Monthly Exam	2	15

Mid-year Holiday

Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Introduction to Microsoft Office Suite	Introducing Students to Microsoft Word Processing System	2	16
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Microsoft Word Processing System	Learning Microsoft Word Processing System	2	17
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Presentation Software (PowerPoint)	Learning Microsoft Word Processing System	2	18
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Presentation Software (PowerPoint)	Presentation Software (PowerPoint)	2	19
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Microsoft Excel	Spreadsheet Software (Excel)	2	20



Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Microsoft Excel	Spreadsheet Software (Excel)	2	21
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Microsoft Excel	Spreadsheet Software (Excel)	2	22
امتحانات شهرية	Theoretical and practical exam on the computer	Review	Review	2	23
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	First Monthly Exam	First Monthly Exam	2	24
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Microsoft Word Processing System	Learning Microsoft Word Processing System	2	24
Daily quizzes Homework Class participation Attendance Monthly exams	Data show presentation	Microsoft Word Processing System	Learning Microsoft Word Processing System	2	25
Daily quizzes Homework Class participation Attendance Monthly exams	Data show presentation	Microsoft Word Processing System	Learning Microsoft Word Processing System	2	26
Daily quizzes Homework Class participation Attendance Monthly exams	Data show presentation	Microsoft Word Processing System	Learning Microsoft Word Processing System	2	27
Daily quizzes Homework Class participation Attendance Monthly exams	Data show presentation	Microsoft Word Processing System	Learning Microsoft Word Processing System	2	28
Daily quizzes Homework Class participation Attendance Monthly exams	Whiteboard and Data Show with student computer usage	Review	Review	2	29



امتحانات شهرية	Whiteboard and Data Show with student computer usage	Second Monthly Exam	Second Monthly Exam	2	30
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11. تقييم المقرر

Course evaluation is based on monthly examinations, weighted at 20 marks per month for a total of 40 marks, plus 10 marks allocated for attendance, participation, and classroom activities across both semesters. The final exam accounts for 50 marks, bringing the overall total to 100 marks.

12. Teaching and Learning Resources

Required Textbooks:	«Computer and Ready-Made Software: Basic Skills Authors: Prof. Dr. Mohammad Belal Al-Zoubi, Prof. Dr. Ahmad Al-Sharai'ah, et al.
Electronic References & Websites:	«Computer and Ready-Made Software: Basic Skills Authors: Prof. Dr. Mohammad Belal Al-Zoubi, Prof. Dr. Ahmad Al-Sharai'ah, et al.

