

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



**Academic Program Description
University of Hilla
College of Education
Department of Mathematics**

2026



University Name: University of Hilla

College/Institute: College of Education

Scientific Department: Department of Mathematics

Academic or Professional Program Name: Bachelor of
Mathematics

Final Degree Awarded: Bachelor of Education in Mathematics

Study System: Annual

Description Preparation Date: 15/11/2025

File Completion Date: 15/11/2025

Signature:

Associate Dean for Scientific Affairs

Name: mohammed ali obays

Date:

Signature:

Head of Department Name:

Dr. Hassanain

Date:

File reviewed by the Quality Assurance and University Performance Division

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

Date 15/11/2025

Asst. Lect. Farzdaq Hayder

Signature



4- Completes educational research or a graduation project in accordance with scientific methodology.

Values

Evidence of Learning Outcomes

- 1- Observation of behavior during individual and group work and field practice.
- 2- Self assessment and peer assessment using specified forms.
- 3- Reports from supervisors and school teachers on commitment and cooperation.
- 4- Evaluation of community participation and adherence to research and learning ethics.

Learning Outcomes

- 1- Demonstrates academic integrity, professional ethics in teaching, and objectivity at work.
- 2- Communicates effectively, works collaboratively, and respects diversity and individual differences.
- 3- Takes responsibility and develops professionally through continuous learning and reflective practice.
- 4- Applies knowledge to serve the school and community and strengthen national belonging.

2. Teaching and Learning Strategies

- Interactive lectures supported by examples and mathematical proofs.
- Dialogue, discussion, and guided questioning to develop mathematical reasoning.
- Problem-based learning, inquiry, and discovery.
- Cooperative learning, peer teaching, and group work.
- Mathematical modeling, case studies, and applied projects.
- Blended learning, the flipped classroom, and e-learning platforms.
- Use of mathematical and statistical software and visual aids.
- Microteaching, classroom observation, and field practice in schools.
- Seminars, presentations, reports, and student research.

3. Assessment Methods

- Classroom questions and short diagnostic and formative tests.
- Homework, proof exercises, and open-ended problem solving.
- Midterm, semester, and final written examinations.
- Oral examinations, presentations, and scientific discussions.
- Individual and group projects and modeling and research reports.
- Practical tests in computer and mathematical software.
- Evaluation of lesson plans, microteaching, and the portfolio.
- Observation of field-practice performance and supervisors' reports.
- Evaluation of the graduation project, self-assessment, and peer assessment according to published criteria.



who support scientific and educational advancement.

Meet the needs of the labor market and other academic departments for specialized personnel and academic courses.

Strengthen national belonging, instill social responsibility, and contribute to building human civilization.

Identify and nurture talented students and guide them toward creativity and scientific research.

4. Program Accreditation

The program currently has no accreditation.

5. External Influences

A 45-day practicum involving teaching, use of the department laboratory for computer instruction and practical software application, development of comprehension skills, and clear and accessible communication of mathematical concepts to students.

6. Program Structure

Notes*	Percentage	Credit Courses	Number of Courses	Program Structure
	%28	46	16	College Requirements
	%72	16	22	Department Requirements
				Summer Training
			Field training is provided in secondary schools.	Other



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Study Plan					
Units	Credit Hours		Course Title	Course Code	Academic Level
	Practical	Theoretical			
8	2	3	Calculus	HECM2101	First Year
6	2	2	Foundations of Mathematics	HECM2102	
6	2	2	Linear Algebra	HECM2103	
2	2	-1	Computer Applications	HECM2104	
4	-	2	General Physics	HECM2105	
2	-	2	Foundations of Education	HECM2106	
4	-	2	Educational Psychology	HECM2107	
4	-	2	Arabic Language	HECM2108	
2		1	Human Rights and Democracy	HECM2109	
2		1	English Language	HECM2110	
8	2	3	Advanced Calculus	HECM2211	Second Year
6	2	2	Ordinary Differential Equations	HECM2212	
5	1	2	Abstract Algebra	HECM2213	
5	1	2	Axiomatic Systems	HECM2214	
4	-	2	Scientific Research Methodology	HECM2215	
4	2	1	Computer Applications	HECM2216	
4	-	2	Developmental Psychology	HECM2217	
4	-	2	Administration and Secondary Education	HECM2218	
2		1	English Language	HECM2219	
2			Arabic Language		
6	2	2	Mathematical Analysis	HECM2320	Third Year
6	2	2	Statistics and Probability	HECM2321	
6	2	2	Ring Theory	HECM2322	
6	2	2	Partial Differential Equations	HECM2323	
6	2	2	Numerical Analysis	HECM2324	
4	-	2	Guidance and Mental Health	HECM2325	
4	2	1	Curricula and Teaching Methods	HECM2326	
2		1	English Language	HECM2327	
6	2	2	Topology	HECM2428	Fourth Year
6	2	2	Complex Analysis	HECM2429	
6	2	2	Mathematical Statistics	HECM2430	
6	2	2	Functional Analysis	HECM2431	
6	2	2	Optimization	HECM2432	
2	2	2	Research Project	HECM2433	

4	4	-	Observation and Teaching Practice	HECM2434	
4	-	2	Measurement and Evaluation	HECM2435	
2		1	English Language	HECM2436	
162					Grand Total

1. Expected Program Learning Outcomes

Knowledge

Methods for Assessing Knowledge and Understanding

- 1- Periodic, semester, and final written and oral examinations.
- 2- Assignments, problems, proofs, and scientific reports.
- 3- Quizzes, presentations, and classroom discussions.
- 4- Practical tests in the use of computers and mathematical software.

Learning Outcomes

- 1- Defines basic and advanced concepts and theories in analysis, algebra, geometry, statistics, probability, and differential equations.
- 2- Explains relationships among mathematical structures and understands the principles of mathematical logic and methods of proof.
- 3- Describes educational and psychological foundations, mathematics curricula and teaching methods, and methods of measurement and evaluation.
- 4- Explains applications of mathematics, computing, and educational software in addressing mathematical and educational problems.

Skills

Methods for Assessing Thinking Skills

- 1- Open-ended problems and tests that measure analysis and reasoning.
 - 2- Individual and group projects in modeling and problem solving.
 - 3- Oral presentations and discussion of solutions and proofs.
 - 4- Practical tests and evaluation of lesson plans according to published criteria.
- 1- Direct observation in microteaching, classroom observation, and field practice.
 - 2- Evaluation of lesson plans, activities, and the portfolio.
 - 3- Evaluation of projects, reports, and practical presentations.
 - 4- School supervisors' reports and discussion of the graduation project.

Learning Outcomes

- 1- Analyzes and formulates problems mathematically and selects the appropriate strategy to solve them.
 - 2- Constructs mathematical proofs and models, interprets results, and critiques solutions.
 - 3- Uses computers and mathematical and statistical software for exploration, computation, and presentation.
 - 4- Designs appropriate plans, lessons, activities, and assessment tools for teaching mathematics.
- 1- Plans and teaches mathematics lessons and manages the classroom according to learner characteristics and individual differences.
 - 2- Uses active-learning strategies and digital tools and technologies effectively.
 - 3- Develops appropriate assessment tools, analyzes results, and provides feedback to improve learning.

4- Completes educational research or a graduation project in accordance with scientific methodology.	
Values	
Evidence of Learning Outcomes	Learning Outcomes
1- Observation of behavior during individual and group work and field practice.	1- Demonstrates academic integrity, professional ethics in teaching, and objectivity at work.
2- Self assessment and peer assessment using specified forms.	2- Communicates effectively, works collaboratively, and respects diversity and individual differences.
3- Reports from supervisors and school teachers on commitment and cooperation.	3- Takes responsibility and develops professionally through continuous learning and reflective practice.
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2. Teaching and Learning Strategies

- Interactive lectures supported by examples and mathematical proofs.
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- Mathematical modeling, case studies, and applied projects.
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3. Assessment Methods

- Classroom questions and short diagnostic and formative tests.
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- Evaluation of the graduation project, self-assessment, and peer assessment according to published criteria.



Professional Development

Orientation of New Faculty Members

- Implement an orientation program on the program mission, outcomes, study plan, and university regulations.
- Assign each new faculty member an experienced academic mentor and monitor their progress.
- Train new faculty in outcomes-based education, classroom management, test construction, and assessment.
- Organize reciprocal classroom visits and provide documented professional feedback.
- Support the use of digital technologies, student guidance, professional ethics, and research ethics.

Professional Development for Faculty Members

- Identify faculty training needs annually and link them to the department plan.
- Organize courses and workshops on advances in mathematics, mathematics education, and modern teaching methods.
- Develop competencies in e-learning, mathematical software, and assessment-tool design.
- Support scientific research, high-quality publication, authorship, translation, and conference participation.
- Hold research seminars, scientific symposia, and communities of practice to exchange expertise.
- Strengthen academic partnerships and cooperation with schools and peer departments.
- Measure the impact of development programs through performance indicators, student evaluations, and peer review.
- Review the program periodically and use course and program reports for continuous improvement.

7. Personal Development Planning

- 1- Identify each student's strengths and academic and professional needs based on learning outcomes and feedback.
- 2- Prepare an individual development plan with measurable annual goals and review it with the academic advisor.
- 3- Develop self-directed learning, scientific research, critical reading, and problem-solving skills.
- 4- Develop digital competencies and the use of computers and mathematical and educational software.
- 5- Strengthen communication, teamwork, leadership, and time-management skills.
- 6- Build a portfolio documenting teaching plans, projects, field practice, and self-reflection.
- 7- Provide career guidance in preparation for the teaching profession, postgraduate study, and related employment opportunities.
- 8- Encourage participation in scientific and community activities and establish lifelong learning.

8. Admission Criteria

1. The general average required for central admission must fall within the applicable limits and comply with the directives of the Ministry of Higher Education and Scientific Research.
2. Conduct a personal interview with applicants and record any speech, behavioral, or personality-related observations.



4. Main Sources of Information about the Program

- The Ministry of Higher Education and Scientific Research guide for academic program and course descriptions and the applicable instructions.
- Quality assurance and academic accreditation standards and the plans of the university, college, and department.
- Annual program and course reports, examination results, and indicators of learning-outcome achievement.

- Minutes of the Department Council, scientific committees, curriculum committees, and quality assurance committees.
- Surveys and feedback from faculty members, students, graduates, school principals, and employers.
- Benchmarking against reputable Mathematics Education programs at Iraqi and regional universities.
- Scientific references, databases, specialized journals in mathematics and mathematics education, and the needs of the labor market and schools.

5. Program Development Plan

- Review the study plan annually and align courses with the program mission, learning outcomes, and national standards.
- Prepare a course-outcome mapping matrix to address gaps and repetition and ensure cognitive and skill progression.
- Update course content and integrate contemporary applications, modeling, computing, and mathematical software.
- Expand the use of active and blended learning, projects, and student research.
- Strengthen microteaching and field practice and build effective partnerships with schools.
- Develop assessment tools and performance rubrics, analyze outcome results, and provide feedback for improvement.
- Update computer laboratories, software, digital resources, and the specialized library.
- Implement a regular faculty-development plan and support scientific research, publication, and academic cooperation.
- Activate an advisory committee and conduct periodic surveys of graduates and employers to respond to community needs.
- Monitor defined performance indicators and prepare an annual report showing achievements, corrective actions, responsibilities, and timelines.



Calculus

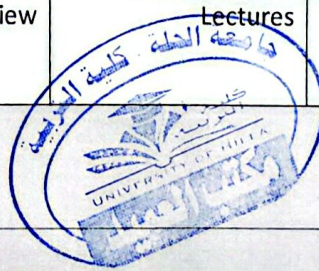
Course Description Form

1. Course Name: Calculus	
2. Course Code: HECM2101	
3. Semester / Year: 2025-2026	
4. Description Preparation Date: 1/4/2026	
5. Available Attendance Forms: Lectures	
6. Number of Credit Hours (Total) / Number of Units (Total): 5 hours $\times$ 24 weeks) / 8 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Assistant Professor Iktifa Daa Jalil Email: dyaaktfa889@gmail.com	
8. Course Objectives	
Course Objectives	his course aims to provide students with clear and comprehensive information about differentiation and integration strategies and enable them to prove theorems related to this course and find appropriate solutions to problems through: - Applying basic mathematical knowledge to write symbolic expressions. - Understanding concepts of differentiation and integration. - Applying a wide range of mathematical principles. - Enhancing analytical skills to solve various mathematical problems
9. Teaching and Learning Strategies	
Strategy	Theoretical and practical lectures Peer learning Group discussions Feedback and thinking Variety of evaluation Use of technology

10. Course Structure

Week	Hours	Learning Outcomes	Topic	Teaching Method	Evaluation
Week 1	5	Knowledge and skills	Some Basic Concepts	Lectures	Daily exam and assignments
Week 2	5	Knowledge and skills	Functions and operations	Lectures	Daily exam and assignments
Week 3	5	Knowledge and skills	Intervals	Lectures	Daily exam and assignments
Week 4	5	Knowledge and skills	Inequality	Lectures	Daily exam and assignments
Week 5	5	Knowledge and skills	Limit	Lectures	Daily exam and assignments
Week 6	5	Knowledge and skills	Types of Functions	Lectures	Daily exam and assignments
Week 7	5	Knowledge and skills	Domain and Range	Lectures	Daily exam and assignments
Week 8	5	Knowledge and skills	Composition of Function	Lectures	Daily exam and assignments
Week 9	5	Knowledge and skills	Continuity	Lectures	Daily exam and assignments
Week 10	5	Knowledge and skills	Derivative	Lectures	Daily exam and assignments
Week 11	5	Knowledge and skills	Chain Rule	Lectures	Daily exam and assignments
Week 12	5	Knowledge and skills	Greatest Integer Function	Lectures	Daily exam and assignments
Week 13	5	Knowledge and skills	Displacement	Lectures	Daily exam and assignments
Week 14	5	Knowledge and skills	Graph Function	Lectures	Daily exam and assignments

Week 15	5	Knowledge and skills	Trigonometric Function	Lectures	Daily exam and assignments
Week 16	5	Knowledge and skills	Applications of Derivatives	Lectures	Daily exam and assignments
Week 17	5	Knowledge and skills	Rolle's Theorem	Lectures	Daily exam and assignments
Week 18	5	Knowledge and skills	Mean Value Theorem	Lectures	Daily exam and assignments
Week 19	5	Knowledge and skills	Indefinite Integrals	Lectures	Daily exam and assignments
Week 20	5	Knowledge and skills	Definite Integrals	Lectures	Daily exam and assignments
Week 21	5	Knowledge and skills	Hyperbolic Function	Lectures	Daily exam and assignments
Week 22	5	Knowledge and skills	Derivative of Exponential Function	Lectures	Daily exam and assignments
Week 23	5	Knowledge and skills	Natural Logarithm Function	Lectures	Daily exam and assignments
Week 24	5	Knowledge and skills	Methods of Integration	Lectures	Daily exam and assignments
Week 25	5	Knowledge and skills	Review	Lectures	Daily exam and assignments



11.Course Evaluation

Two semesters, each 4 months, including exams and continuous assessment.

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Calculus by Thomas and others
Main references (sources)	Advanced Engineering Mathematics – H.K. Das
Recommended books and references (scientific journals, reports...)	

Electronic References, Websites

Internet resources



Course Description Form

1. Course Name: Human Rights Course – First Stage	
2. Course Code: HECM2109	
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



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 bodies	Human rights	Lecture / Discussion	Re-asking previous questions and answering them / Oral, written tests
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:	
"Arabic language".	
2. Course Code:	
HECM2108	
3. Semester:	
"2025 / 2026"	
4. Description Preparation Date:	
translates to "classrooms"	
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.

10. Course Structure

No.	Hours	Required Learn	Unit or subject name	Learning method	Evaluation
		Outcomes		method	
First week			مقدمة تعريفية بعلم الإملاء وواضعه ونشأته وتطوره	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة 2
Second week			الهمزة الأولى	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة 2
Third week			الهمزة المتوسطة	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة 2

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

thirteenth week			1 العدد والمعدود	طريقة القاء المحاضرات والمناقشة	توجيه الأسئلة القصيرة	
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



Course Evaluation

درجة الفصل الدراسي (200) توزع بالشكل الآتي

25 : الفصل الأول

20 : الامتحان النصف فصلي

5 : النشاط و الحضور

25 : الفصل الثاني

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، نعم جرجيس زراير ، مكتبة اللغة العربية ، بغداد- العراق، ط6، 2017م
Recommended books and references (scientific journals, reports...)	الإمام الواضح، عبد المجيد النعيمي، مكتبة دار المتنبي، بغداد- العراق، ط3، 1967م
Electronic references, websites	شبكة اللوكة موقع فصحى إلكتروني مكتبة نرجس ونية ونية
Course Dev	المكتبة الوقفية الإلكترونية ونية مكتبة نور الإلكترونية ●
• • • • • • • خطة تطوير المقرر الدراسي	
elopment Plan	



1. Course Name					
Foundations of Education					
2. Course Code:					
HECM2106					
3. Semester / Year:					
Annual					
4. Description Preparation Date:					
1/4/2026					
5. Available Attendance Forms					
: Lectures					
6. Number of Credit Hours (Total) / Number of Units (Total): 5 hours × 24 weeks / 8 units					
60					
7. Course administrator's name (mention all, if more than one name)					
Name: Assist. Lecturer Dhafer Nasser Hussein					
Email:					
8. Course Objectives					
Course Objectives		The course aims to introduce students to the foundations and concepts of education, and to develop their abilities to understand and analyze educational issues and principles within the educational context.			
9. Teaching and Learning Strategies					
Strategy		various teaching methods are used in delivering the course, such as lectures, discussions, and questioning, as well as cooperative learning and brainstorming, with the use of modern educational tools.			
10. Course Structure					
Week	Hours	Learning Outcomes	Unit / Topic	Teaching Method	Evaluation Method
2		Concept of Education	Foundations of Education	Lecture + Discussion	Oral / Quiz
2		Education in its Individual Meaning	Foundations of Education	Lecture + Discussion	Oral / Quiz
2		Historical Foundations of Education	Foundations of Education	Lecture + Discussion	Oral / Quiz

2		Importance of Historical Foundations	Foundations of Education	Lecture + Discussion	Oral / Quiz
2		Function of Education	Foundations of Education	Lecture + Discussion	Oral / Quiz
2		Difference Between Education and Teaching	Foundations of Education	Lecture + Discussion	Oral / Quiz
2		Principles of Education	Foundations of Education	Lecture + Discussion	Oral / Quiz
2		Characteristics of Education	Foundations of Education	Lecture + Discussion	Oral / Quiz
2		Importance of Education	Foundations of Education	Lecture + Discussion	Oral / Quiz
2		Education in Primitive Societies	Foundations of Education	Lecture + Discussion	Oral / Quiz

11. Course Evaluation

The total mark (100) is distributed according to student tasks such as daily preparation, daily exams, oral exams, monthly exams, written exams, reports, etc.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Al-Laqani (2001) Principles of Education
Main references (sources)	Adas (2000) Foundations of Education.
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form



Course Description Form

1. Course Name:	
Educational Psychology	
2. Course Code:	
HECM2107	
3. Semester / Year:	
Annual	
4. Description Preparation Date:	
1-4-2026	
5. Available Attendance Forms:	
In-person	
6. Number of Credit Hours (Total) / Number of Units (Total):	
60	
7. Course administrator's name (mention all, if more than one name)	
Name: Asst. Lec. Dhafer Nasser Hussein	
Email:	
8. Course Objectives	
Course Objectives	Identify the concept of educational psychology and its importance in the educational process. Understand learners' developmental characteristics at different stages. Analyze learning theories and apply them in the classroom. Interpret learners' behavior in educational situations. Develop classroom management skills and handle individual differences. Identify motivation and methods to enhance it among students. Develop skills in educational measurement and evaluation. Apply psychological principles to improve teaching and learning. Promote positive attitudes toward the teaching profession. Develop scientific thinking in dealing with educational problems.
9. Teaching and Learning Strategies	
Strategy	Identify the concept of educational psychology and its importance in the educational process. Identify the concept of educational psychology and its importance in the educational process. Understand learners' developmental characteristics at different stages. Understand learners' developmental characteristics at different stages. Analyze learning theories and apply them in the classroom. Analyze learning theories and apply them in the classroom. Interpret learners' behavior in educational situations. Interpret learners' behavior in educational situations. Develop classroom management skills and handle individual differences. Develop classroom management skills and handle individual differences. Identify motivation and methods to enhance it among students. Identify motivation and methods to enhance it among students. Develop skills in educational measurement and evaluation. Develop skills in educational measurement and evaluation.

Apply psychological principles to improve teaching and learning. Apply psychological principles to improve teaching and learning.
 Promote positive attitudes toward the teaching profession. Promote positive attitudes toward teaching profession.
 Develop scientific thinking in dealing with educational problems. Develop scientific thinking in dealing with educational problems.

10. Course Structure

Week	Hours	Learning Outcomes	Topic	Teaching Method	Assessment
	2		Introduction to science and psychology	Lecture + Discussion	Oral / Quiz
	2		Difference between learning and teaching	Lecture + Discussion	Oral / Quiz
	2		Definition of educational psychology	Lecture + Discussion	Oral / Quiz
	2		Importance of educational psychology	Lecture + Discussion	Oral / Quiz
	2		Objectives and relation to other sciences	Lecture + Discussion	Oral / Quiz
	2		Teacher personality	Lecture + Discussion	Oral / Quiz
	2		Factors affecting teaching effectiveness	Lecture + Discussion	Oral / Quiz
	2		UNESCO educational problems	Lecture + Discussion	Oral / Quiz
	2		Motivation and types	Lecture + Discussion	Oral / Quiz

	2		Functions of motivation	Lecture + Discussion	Oral / Quiz
	2		Motivation strategies	Lecture + Discussion	Oral / Quiz
	2		Memory	Lecture + Discussion	Oral / Quiz
	2		Atkinson-Shiffrin model	Lecture + Discussion	Oral / Quiz
	2		Remembering factors	Lecture + Discussion	Oral / Quiz
	2		Forgetting	Lecture + Discussion	Oral / Quiz
	2		Forgetting factors	Lecture + Discussion	Oral / Quiz
	2		Transfer of learning	Lecture + Discussion	Oral / Quiz
	2		Modern transfer theories	Lecture + Discussion	Oral / Quiz
	2		Feedback	Lecture + Discussion	Oral / Quiz
	2		Types of feedback	Lecture + Discussion	Oral / Quiz
	2		Learning conditions	Lecture + Discussion	Oral / Quiz
	2		Trial and error learning	Lecture + Discussion	Oral / Quiz
	2		Thorndike applications	Lecture + Discussion	Oral / Quiz
	2		Classical conditioning	Lecture + Discussion	Oral / Quiz
	2		Classical learning concepts	Lecture + Discussion	Oral / Quiz
	2		Pavlov applications	Lecture + Discussion	Oral / Quiz
	2		Gestalt theory	Lecture + Discussion	Oral / Quiz
	2		Gestalt concepts	Lecture + Discussion	Oral / Quiz

	2		Insight	Lecture + Discussion	Oral / Q
	2		Gestalt applications	Lecture + Discussion	Oral / Q

11. Course Evaluation

Distribution of 100 marks based on daily, oral, monthly and written exams and reports.

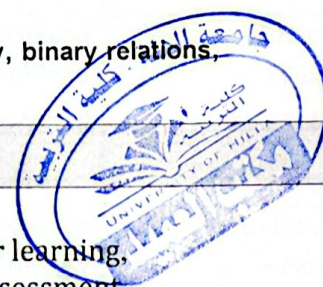
12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Educational Psychology – Fouad Abu Hatab
Main references (sources)	Imad Abdul Rahim Zaghoul
Recommended books and references (scientific journals, reports...)	Educational Psychology and its Applications – Moham Jassim Mohammed
Electronic References, Websites	Educational Psychology and its Applications – Mohammed Baili



Course Description Form

1. Course Name: : Foundations of Mathematics					
2. Course Code: HECM2102					
3. Semester / Year: 2025-2026					
4. Description Preparation Date: 1/4/2026					
5. Available Attendance Forms: Lectures					
6. Number of Credit Hours (Total) / Number of Units (Total): 5 hours × 24 weeks) / 8 units					
7. Course administrator's name (mention all, if more than one name)					
Name: Prof. Dr. Asaad Mohammed Ali Al-Husseini					
Email: asaad_hosain@itnet.uobabylon.edu.iq					
8. Course Objectives					
Course Objectives		-Cognitive skills (thinking and analysis) -Enable students to solve mathematical problems -Understanding methods of proof and mathematical reasoning -Ability to deal with real-life applications -Provide basic concepts of mathematical logic, set theory, binary relations, mappings, cardinal numbers, natural numbers, etc.			
9. Teaching and Learning Strategies					
Strategy		Lecture, discussion, questioning, brainstorming, peer learning, group discussions, feedback and reflection, varied assessment, use of educational technology			
10. Course Structure					
Week	Hours	Learning Outcomes	Topic	Teaching Method	Evaluation



Week 1	4 hours	Mastering basic mathematical skills and proof methods	Mathematical Logic	Lecture / Discussion / Brainstorming / Peer Learning	Continuous assess + Final ex
Week 2	4 hours	Mastering basic mathematical skills and proof methods	Logical Statements	Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 3	4 hours	Mastering basic mathematical skills and proof methods	Set Theory	Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 4	4 hours	Mastering basic mathematical skills and proof methods	Methods of Proof	Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 5	4 hours	Mastering basic mathematical skills and proof methods	Relations	Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 6	4 hours	Mastering basic mathematical skills and proof methods	Functions	Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 7	4 hours	Mastering basic mathematical skills and proof methods	Cardinality and Basic Numbers	Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 8	4 hours	Mastering basic mathematical skills and proof methods	Construction of Natural Numbers	Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 9	4 hours	Mastering basic mathematical skills and proof methods	Binary Operations and Algebraic Systems	Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 10	4 hours	Mastering basic mathematical skills and proof methods	Groups and Rings	Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 11	4 hours	Mastering basic mathematical skills and proof methods	Construction of Integers	Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam



Week 12	4 hours	Mastering basic mathematical skills and proof methods	Construction of Rational Numbers	Lecture / Discussion / Brainstorming / Peer Learning	Continuous assess + Final ex
Week 13	4 hours	Mastering basic mathematical skills and proof methods	Construction of Real Numbers	Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 14	4 hours	Mastering basic mathematical skills and proof methods	Construction of Complex Numbers	Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 15	4 hours	Mastering basic mathematical skills and proof methods		Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 16	4 hours	Mastering basic mathematical skills and proof methods		Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 17	4 hours	Mastering basic mathematical skills and proof methods		Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 18	4 hours	Mastering basic mathematical skills and proof methods		Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 19	4 hours	Mastering basic mathematical skills and proof methods		Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 20	4 hours	Mastering basic mathematical skills and proof methods		Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 21	4 hours	Mastering basic mathematical skills and proof methods		Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 22	4 hours	Mastering basic mathematical skills and proof methods		Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 23	4 hours	Mastering basic mathematical skills and proof methods		Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam

Week 24	4 hours	Mastering basic mathematical skills and proof methods		Lecture / Discussion / Brainstorming / Peer Learning	Continuous asse + Final
Week 25	4 hours	Mastering basic mathematical skills and proof methods		Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam
Week 26	4 hours	Mastering basic mathematical skills and proof methods		Lecture / Discussion / Brainstorming / Peer Learning	Continuous assessment + Final exam

11. Course Evaluation

50marks continuous assessment (daily, monthly exams, participation)
50marks final exam

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	: Foundations of Mathematics Part 1 & 2 – Hadi Jaber Mustafa:
Main references (sources)	Introduction to Foundations of Mathematics – Universi Baghdad
Recommended books and references (scientific journals, reports...)	Recommended: The Foundations of Mathematics – F Kunen 2007
Electronic References, Websites	Internet resources



Course Description Form

1. Course Name: General physics	
2. Course Code: HECM2105	
3. Semester / Year: Year	
4. Description Preparation Date: 22/12/2025	
5. Available Attendance Forms: weekly	
6. Number of Credit Hours (Total) / Number of Units (Total): 60 hours	
7. Course administrator's name (mention all, if more than one name) Name: Shaymaa Ahmed Email: : shsh53577@gmail.com	
8. Course Objectives	
Course Objectives	Introducing students to the science of physics, which includes linear and rotational motion and related physical properties such as work, force, energy, and others. Equipping students theoretically and practically, enabling them to pursue postgraduate studies and excel in research and work in scientific and industrial institutions. Developing their ability to find solutions using mathematical equations.
9. Teaching and Learning Strategies	
Strategy	The lecture method involves using an interactive whiteboard Students will be provided with the fundamentals and additional topics related to thinking skills Questions will be posed to students, and discussion groups will be formed during lectures to discuss and solve problems that require thinking and analysis Students will be given assignments to solve problems.
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Introducing the student to the laws of physics and potential energy	Introduction PHYSICS AND MEASUREMENTS	Lecture, interactive whiteboard, and PowerPoint presentation	quiz and homework
2	2	Introducing the student to defining dimensions	Dimensional Analysis	Lecture, interactive whiteboard, and PowerPoint presentation	quiz and homework
3	2	Learn about the concept of vectors and the properties of vectors	Vector and Scalar Properties of Vectors	Lecture, interactive whiteboard, and PowerPoint presentation	quiz and homework
4	2	Introducing the student to the coordinate system	Coordinate system	Lecture, interactive whiteboard, and PowerPoint presentation	quiz and homework
5	2	Introducing the student to the Properties of Vectors and unit vector	Properties of Vectors and unit vector	Lecture, interactive whiteboard, and PowerPoint presentation	quiz and homework
6	2	Introducing the student to the components of vectors	Components of a vector	Lecture, interactive whiteboard, and PowerPoint presentation	quiz and homework
7		Solve the exercises			
8		exam			

9	2	Introducing the student to the science of motion description	Kinematics Description of Motion	Lecture, interactive whiteboard, and PowerPoint presentation	quiz and homework
10	2	Understanding the laws of motion and the concept of force	Dynamics The Law of Motion The law of motion The concept of force	Lecture, interactive whiteboard, and PowerPoint presentation	quiz and homework
11	2	Learn about Newton's laws	Newton's laws of motion	Lecture, interactive whiteboard, and PowerPoint presentation	quiz and homework
12	2	The student was introduced to work, kinetic energy, and the relationship between them.	Energy and work	Lecture, interactive whiteboard, and PowerPoint presentation	quiz and homework
13	2	The student defines the relationship between work and potential energy	Work and potential energy	Lecture, interactive whiteboard, and PowerPoint presentation	quiz and homework
14	2	Introducing the student to the concept of centripetal mass and how to calculate it	Center of mass and linear momentum	Lecture, interactive whiteboard, and PowerPoint presentation	quiz and homework

15	2	Collision and thrust identification	collosion and impulse	Lecture, interactive whiteboard, and PowerPoint presentation	quiz and homework
16	2	Explanation of rotational motion and its difference from linear motion	Rotation	Lecture, interactive whiteboard, and PowerPoint presentation	quiz and homework
17		Solve the exercises			
18		exam			

11.Course Evaluation

Theoretical exams (monthly and final)
 Reports
 Daily quizzes
 Individual and group discussions



12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Fundamentals of Physics, Classical Mechanics
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	