

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



# **Academic Program and Course Description Guide**

**2024**

## **Introduction:**

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

## **Concepts and terminology:**

**Academic Program Description:** The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

**Course Description:** Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

**Program Vision:** An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

**Program Mission:** Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

**Program Objectives:** They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

**Curriculum Structure:** All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

**Learning Outcomes:** A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

**Teaching and learning strategies:** They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

## Academic Program Description Form

University Name: Wasit

Faculty/Institute: College of Education for Pure Science

Scientific Department: Physics


Academic or Professional Program Name: Bachelor

Final Certificate Name: Bachelor of Education in Physics Science

Academic System: Annual

Description Preparation Date: 2023–2024

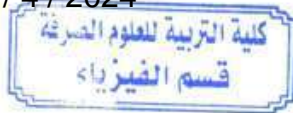
File Completion Date: 2023–2024


Signature: 

Head of Department Name:

Lec. Ali Abid Jaber

Date: 7 / 4 / 2024



Signature: 

Scientific Associate Name:

Assist. prof. Mahdi Alwan Abood

Date: 7 / 4 / 2024

Assist Prof. Dr. Mahdi Alwan Al-Quraishi  
Asst Dean for Academic Affairs  
& Graduate Studies

The file is checked by: Lec. Saja Hussain Dilfy

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date: 7 / 4 / 2024

Signature: 



  
17/4  
Approval of the Dean

### **1. Program Vision**

The Department of Physics aspires to leadership and excellence in the field of physical science education studies and achieving quality standards and programmatic accreditation, making it a distinguished academic and research department at the local, Arab, regional and global levels. All of this is in order to contribute to the progress of the country, the development of society, and reaching the ranks of reputable international colleges.

### **2. Program Mission**

The department aims to achieve its goals by preparing competent graduates who have the skills and information in various physics disciplines, which qualifies them to work in the country's scientific, educational and research institutions and serve community issues.

### 3. Program Objectives

1 - Preparing teaching staff to support middle, secondary and preparatory schools with the necessary teaching skills to teach physics through the department's scientific programs and activities.

2- Graduate students should be familiar with the basic concepts of physics

3- Students must be qualified to complete postgraduate studies to provide universities and institutes with teaching staff

4- Activating mechanisms for joint cooperation and openness to various universities and educational institutions at the local, regional and international levels in a way that includes all components of the educational system.

5- Working with other college departments to enter international classifications.

6- Embracing distinguished and distinguished students and motivating and encouraging them in order to become future scientific leaders, whether as teachers or researchers.

7- Working to improve and develop the capabilities and skills of faculty members and all employees in the college to ensure

access to comprehensive quality management in the scientific and administrative fields.

8- Developing the laboratories of the Physics Department in line with the quality of the laboratories.



#### 4. Program Accreditation

No

#### 5. Other external influences

Is there a sponsor for the program?

#### 6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
<b>Institution Requirements</b>	<b>7</b>	<b>14</b>	<b>%7.9545</b>	<b>Specialized+optinal</b>
<b>College Requirements</b>	<b>9</b>	<b>32</b>	<b>%18.182</b>	<b>Specialized</b>
<b>Department Requirements</b>	<b>23</b>	<b>122</b>	<b>%69.318</b>	<b>Specialized+optinal</b>
<b>Summer Training</b>	<b>1</b>	<b>4</b>	<b>%2.273</b>	<b>Specialized</b>
<b>Other</b>	<b>1</b>	<b>4</b>	<b>%2.273</b>	<b>Specialized</b>

\* This can include notes whether the course is basic or optional.

## 7. Program Description

Year/Level	Course Code	Course Name	Credit Hours		
			Theoretical	Practical	Tutorial
first stage	PHM 103	Mechanics	3		2
first stage	PHHM 105	Heat and properties of the material	2		2
first stage	PHEM 104	Electric and Magnetism I	3		2
first stage	1PHMT 106	Mathematics I	3		
first stage	PHBB 107	Principles of Education	2		
first stage	PHES 109	Educational psychology	2		
first stage	1PHIC 108	Computer I	1		
first stage	AR 102	Arabic Language	2		
first stage	1CsEl 106	English Language	2		
first stage	HP 101	Human rights and democracy	1		
first stage	PHST 111	Statistics	1		
Second stage	PHOP 210	Optics	3		2
Second stage	PHAS 211	Astronomy	2		
Second stage	PHEA 212	Electric and Magnetism II	2		2
Second stage	2PHMT 213	Mathematics II	3		
Second stage	218PHS	Sound and wave motion	2		
Second stage	PHRM 214	Fundamentals of scientific research	2		
Second stage	PHEt 216	Secondary Education and Educational Administration	2		
Second stage	PSY 241	Developmental psychology	2		
Second stage	1082PHIC	Computer II	1		
Second stage	2CsEl 106	English Language	1		
Second stage	CsBc 222	Crimes of the Ba'ath Party	1		
Third stage	PHE 321	Electronics	3		2
Third stage	PHOT 300	Optional	2		
Third stage	PHTH 320	Thermodynamic	3		
Third stage	PHCF 325	Complex functions	2		
Third stage	319PHAP	Atomic and molecular Physics	3		2
Third stage	PHAM 322	Analytical Mechanics	3		
Third stage	PHCT 324	psychological Guidance and psychological health	2		
Third stage	PHMP 323	Curriculum and methods of teaching	2		

Fourth stage	<b>PHNP 427</b>	Nuclear physics	<b>3</b>		<b>2</b>
Fourth stage	<b>PHLA 431</b>	Laser	<b>2</b>		
Fourth stage	<b>PHEP 433</b>	Electromagnetic theory	<b>3</b>		
Fourth stage	<b>PHQM 432</b>	Quantum mechanics	<b>3</b>		
Fourth stage	<b>PHSS 426</b>	Solid state physics	<b>3</b>		
Fourth stage	<b>PHP 429</b>	Research project	<b>2</b>		
Fourth stage	<b>PHEL 434</b>	Demonstration instruments Lab			<b>2</b>
Fourth stage	<b>ME 430</b>	Measurement and evaluation	<b>2</b>		
Fourth stage	<b>PHV 428</b>	Practical education	<b>1</b>		<b>2</b>

## 8. Expected learning outcomes of the program

### Knowledge

A1: Technical knowledge in the fields of physical sciences	A1: Providing students with in-depth knowledge in various fields of physical sciences, such as analytical mechanics, electromagnetism, thermodynamics, and other physical sciences.
A2: Understanding practical applications of physical sciences	A2: Principles of physics play a crucial role in understanding and developing technology. Where physics principles can be applied in the field of technology: electronic circuit design.
A3: Teamwork and communication skills	A3: The Department of Physics aims to provide graduates with scientific skills in the theoretical and applied fields so that graduates can learn about the importance and how to use physical devices and their uses in multiple fields.
A4: Providing students with teaching, educational guidance, and classroom management skills	A4: Providing students with the necessary information about teaching strategies, methods, and methods, and providing them with teaching skills such as planning, implementation, evaluation, and time management.

### Skills

B1: Skills and abilities of a graduate of the physics program	B1: Identifying skills that support the professional development of physics teachers in the learning method and enriching the educational field in the field of discovering the latest digital technologies, which opens multiple horizons of knowledge and adapts them to the learner's needs and education styles.
B2: Linking physical theories and their applications in practical aspects.	B2: Linking theoretical and practical aspects in the fields of materials science and solid state physics and how to deal with laboratory equipment that is used in studying materials physics.
B3: Personal skills and responsibility	B3: Learn independently, work as a team, and recognize the work of others.
B4: Cognitive skills.	B4: Apply their knowledge and understanding to solve qualitative and quantitative problems of a familiar and unfamiliar nature, implement and analyze the results of an experimental test, and draw valid conclusions.

### Ethics

C1: Adherence to professional ethics C2: Commitment to scientific values in the physical sciences C3: Integrity and ethics C4: Knowledge and learning	C1: Students are encouraged to understand and apply professional ethical values in the field of physical sciences, such as integrity, respect, responsibility, and protection of privacy and security. C2: Explaining the importance of scientific values and that they are one of the most important responsibilities of education, and explaining the importance of scientific values in confronting negative messages received through modern means of communication. C3: The program is concerned with promoting ethical values and integrity in the field of physical sciences, and teaches students the importance of ethical rules and correct behavior in the field of technology. C4: The program enhances the value of knowledge and learning by providing an educational environment that encourages the acquisition of knowledge and the development of skills in multiple areas of physical science

## 9. Teaching and Learning Strategies

The teaching and learning strategies and methods adopted in implementing the program are:

- 1- Active learning and participation
- 2- Project learning
- 3- Cooperative learning
- 4- Problem-based learning
- 5- Lecture method using technology for learning
- 6- Stimulate curiosity and exploration
- 7- Laboratory teaching strategies

10. Evaluation methods
1- Monthly exams
2- Daily exams
3- Group projects
4- Reports

11. Faculty						
Faculty Members						
Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
D.r Ali Abed Jaber	physics	General physics			yes	
Assist.Prof. Mahdi Alwan Abood	Methods of teaching science	Methods of teaching physics			yes	
Assist.Prof Ahmed Qasim Ubaid	physics	Molecular physics and lasers			yes	
D.r Haider Jameel Hassan	physics	General physics			yes	
Masar Faseeh Jabbar	Mathematics	Mathematics				
assistant teacher Muna Mahmood Baden	Renewable energy electrical engineering	Renewable energy electrical engineering			yes	
assistant teacher Hussein Shoundi Alhijj		Numerical Analysis			yes	
Maysloon Kareem kazm. assistant teacher	physics	General physics			yes	

Assistant Lecturer Kareem Anwer jasim	psychology	General psychology			yes	
Assistant teacher Nagham Fadhil hussain	English language	Language			yes	
Assist lec. Huda Hameed Naif	Arabic	Literature			yes	
Assistant lecturer. Lara Mhmood Jabbar	History	Recent history				
M. M. Alaa Sabah Mohammad	Educational psychology	Educational psychology				
assistant leacture Noor Riyadh Riyas	physics	General physics				
Assistant lecturer Fouad Lateef Turki	philosophy	Modern philosophy				

## **Professional Development**

### **Mentoring new faculty members**

- 1- Development and Training Programs
- 2- Guidance and Mentoring Programs
- 3- Participation in Professional Learning Communities
- 4- Academic Counseling

### **Professional development of faculty members**

- 1- Needs analysis
- 2- Implementing training programs and workshops
- 3- Applying modern strategies in teaching
- 4- Monitor and evaluate performance
- 5- Evaluate feedback and support



<b>12. Acceptance Criterion</b>
<ol style="list-style-type: none"><li>1. central admission</li><li>2. Parallel Admission</li><li>3. Admission for Top Teachers</li></ol>



<b>13. The most important sources of information about the program</b>
<ul style="list-style-type: none"><li>• Sectorial Committee</li><li>• Ministerial Committees for Curriculum Development</li><li>• University and College Website</li><li>• Ministry of Higher Education and Scientific Research Website</li></ul>



<b>14. Program Development Plan</b>
Applying accreditation standards for educational colleges.

Program Skills Outline															
				Required program Learning outcomes											
Year / Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First	PHM 103	Mechanics	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	PHHM 105	Heat and properties of the material	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	PHEM 104	Electric and Magnetism I	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	1PHMT 106	Mathematics I	Basic					√	√	√	√	√	√	√	√
	PHBB 107	Principles of Education	Basic					√	√	√	√	√	√	√	√
	PHES 109	Educational psychology	Basic									√	√	√	√
	1PHIC 108	Computer I	Basic									√	√	√	√
	AR 102	Arabic Language	Basic									√	√	√	√
	1CsEl 106	English Language	Basic									√	√	√	√
	HP 101	Human rights and democracy	Basic									√	√	√	√
	PHST 111	Statistics	Basic									√	√	√	√

<b>Second</b>	PHOP 210	Optics	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
	PHAS 211	Astronomy	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
	PHEA 212	Electric and Magnetism II	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
	2PHMT 213	Mathematics II	<b>Basic</b>					√	√	√	√	√	√	√	√
	218PHS	Sound and wave motion	<b>Basic</b>					√	√	√	√	√	√	√	√
	PHRM 214	Fundamentals of scientific research	<b>Basic</b>									√	√	√	√
	PHEt 216	Secondary Education and Educational Administration	<b>Basic</b>									√	√	√	√
	PSY 241	Developmental psychology	<b>Basic</b>									√	√	√	√
	1082PHIC	Computer II	<b>Basic</b>									√	√	√	√
	2CsEI 106	English Language													
<b>Third</b>	CsBc 222	Crimes of the Ba'ath Party	<b>Basic</b>									√	√	√	√
	PHE 321	Electronics	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
	PHOT 300	Optional	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
	PHTH 320	Thermodynamic	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√

<b>Fourth</b>	PHCF 325	Complex functions	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
	PHAP 319	Atomic and molecular Physics													
	PHAM 322	Analytical Mechanics	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
	PHCT 324	psychological Guidance and psychological heath	<b>Basic</b>					√	√	√	√	√	√	√	√
	PHMP 323	Curriculum and methods of teaching	<b>Basic</b>									√	√	√	√
	PHNP 427	Nuclear physics	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
	PHLA 431	Laser	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
	PHEP 433	Electromagnetic theory	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
	PHQM 432	Quantum mechanics	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
	PHSS 426	Solid state physics	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
	PHP 429	Research project	<b>Optional</b>	√	√	√	√	√	√	√	√	√	√	√	√
	PHEL 434	Demonstration instruments Lab													
	ME 430	Measurement and evaluation	<b>Optional</b>									√	√	√	√
	PHV 428	Practical education	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√

- Please tick the boxes corresponding to the individual program learning outcomes under evaluation

## Course Description Form

1. Course Name:	
Classic mechanics	
2. Course Code: PHM103	
3. Semester / Year:2024- 2023	
4. Description Preparation Date:	
2024/2/27	
5. Available Attendance Forms:	
My attendance is mandatory	
6. Number of Credit Hours (Total) / Number of Units (7)	
90    hours 3    hours	
7. Course administrator's name (mention all, if more than one name)	
PHD. lecturer ALI ABED JABER    email :alia624@uowasit.edu.iq	
8. Course Objectives	
<b>Course Objectives</b>	Students are familiarized with the general and specific principles of classical mechanics in motion and its types, along with the interpretation of the laws related to it. <ul style="list-style-type: none"> <li>Providing students with the scientific skills to deal with mechanical problems and how to benefit from and deal with them in different situations.</li> <li>Explain and illustrate real-life examples of classical mechanics.</li> <li>Urging students to possess scientific information related to mechanics and apply it now and in the future when faced with any problem.</li> <li>Urging students to acquire various modern teaching skills in explaining mechanical topics and thus acquiring Experience in dealing with various physics topics</li> </ul>

## 9. Teaching and Learning Strategies

<b>Strategy</b>	<ul style="list-style-type: none"> <li>• Giving scientific lectures on understanding classical mechanics</li> <li>• Oral and short exams through discussion examples related to the topic</li> <li>• Written exams to refine what students have learned.</li> <li>• Classical mechanics describes the motion of very small (microscopic) bodies from the beginning</li> </ul> <p>Projectiles include machines and astronomical objects such as planets, galaxies, spaceships, and stars.</p> <ul style="list-style-type: none"> <li>• Study Newton's laws of motion</li> <li>• The study of the behavior of most “natural” things.</li> </ul>
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## 10. Course Structure

<b>Week</b>	<b>Hou rs</b>	<b>Required Learning Outcomes</b>	<b>Unit or subject name</b>	<b>Learning method</b>	<b>Evaluation method</b>
1	3	Gaining knowledge in understanding the meaning of movement in one dimension and how to apply it to movement in two or three dimensions	Measurements and movement in one dimension	My presence	General questions, discussion, and problem solving
2	3	Gaining knowledge in understanding the meaning of movement in one dimension and how to apply it to movement in two or three dimensions	Movement is in one dimension	My presence	General questions and discussion or exam
3	3	Understand the meaning of vector and scalar quantities	Vector and scalar quantities	My presence	General questions, discussion, and problem solving
4	3	Understand numerical and cross	Numerical and vector	My presence	oral test

		multiplication	multiplication		
5	3	Understanding motion in two dimensions	Motion in two dimensions and derivation of its laws	My presence	General questions and problem solving
6	3	Movement in two dimensions Shells	Movement in two dimensions	My presence	solving equations
7	3	A monthly written exam	evaluation	My presence	Monthly in all previous lessons
8	3	Definition of Newton's laws of motion and when to use them in different situations	Definition and derivation of Newton's laws	My presence	oral test
9	3	Dealing with the laws of motion in the presence of friction	Friction and applied frictional forces	My presence	oral test
10	3	Definition of regular and irregular circular motion and derivation of its laws	Circular motion	My presence	Solve related issues
11	3	Understanding gravity	Circular motion	My presence	Complete the solution of related issues
12	3	Understanding work and energy and derivation of laws	Work and energy	My presence	Solve related issues
13	3	Understanding the laws Preservation	Law of conservation of energy	My presence	Solve related issues

14	3	Understanding linear momentum and linear momentum-impulse theory	Linear momentum, thrust, and collisions	My presence	Solve related issues
15	3	Understanding linear momentum and the theory of linear momentum-thrust and collisions	Linear momentum, thrust, and collisions	My presence	Complete the topic and solve the problems
16	3	A monthly written exam	evaluation	My presence	A monthly exam in all previous subjects
17	3	What is rotational motion, its laws, and its connection to translational motion	Rotary movement	My presence	Solve related issues
18	3	Understanding rotational kinetic energy and moment of inertia	Rotary movement	My presence	Solve related issues
19	3	Torque and rigid body	Rotary movement	My presence	Solve related issues
20	3	A monthly written exam	evaluation	My presence	A monthly exam in all previous subjects

#### Course structure of Experiments

1-3	2	A lecture	1-General instructions about the laboratory 2- Instructions on how to write the report 3- Steps to teach	introduction	quiz
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			graphing		
4-6	2	A lecture & application	Simple Harmonic motion	Exp. 1	General questions & quiz
7-9	2	A lecture & application	Hookes law	Exp.2	Quiz & application
10-12	2	A lecture & application	Calculate the Coefficient of Friction on The horizontal surface	Exp. 3	Solve questions & quiz
13-15	2	A lecture & application	Measurement Of viscosity Of a liquid By stokes law	Exp.4	Oral exam & solve question
16	2	A lecture	Review		
17	2	A lecture	Exam 1		
18-20	2	A lecture & application	Bifilar pendulum	Exp.5	Oral exam & solve questions
21-23	2	A lecture & application	Free fall	Exp.6	solve questions
24-26	2	A lecture & application	The balance Of power	Exp.7	Quiz
27-28	2	A lecture & application	Measurement The coefficient Of surface Tension of Liquid by capillary tube	Exp.8	Oral exam & application test
29	2	A lecture	Review		
30	2	A lecture	Exam2		
. Course Evaluation					
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc					
. Learning and Teaching Resources					
1 - Classical Mechanics for Physics Graduate Students , ERNESTO CORINALDESI , 1998 . 2 - Classical Mechanics , R. DOUGLAS and GOREGE , 2006 .				Required prescribed books (Methodology, if any)	
1 - Physics for Scientists and Engineers with modern				Main references	

<p>physics , SERWAY and JEWETT , 9 Edition , 2014 .</p> <p>2- University Physics by Francis W. Sears, Mark W. Zemanseky and Hugh D. Young, 1982.</p> <p>3- Introduction to Physics by Jojn D.Cutnell, Kenneth W.Johnson 8th Ed.,2010</p>	(sources)
<p>1- Classical Mechanics by Herbert Goldstein, 2002.</p> <p>2- Classical Mechanics by Michael Cohen, 2014.</p> <p>3- Classical Mechanics by Mahmoud Hamza Dahi, 2020.</p>	Recommended supporting books and references (scientific journals, reports....
<p>1- Educational Physics Network</p> <p>2- Al-Farid website in physics</p> <p>3- NASA website in Arabic for physics</p>	electronic references, Internet sites

## Course Description Form

1. Course Name: Physics of heat and properties of matter	
2. Course Code: <b>101PHM</b>	
3. Semester / Year: 2023-2024	
4. Description Preparation Date: 28-2-2024	
5. Available Attendance Forms: Actual mandatory attendance	
6. Number of Credit Hours (Total) 60 hours / Number of Units (Total) : 4Units	
7. Course administrator's name (mention all, if more than one name)	
Name : Assistant Prof. Ahmed Qasim Ubaid Email : aubaid @uowasit.edu.iq	
8. Course Objectives	
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>• Students learned about heat, the properties of matter, and their role in understanding the principles of physics and in daily life</li> <li>• How to employ this knowledge in confronting daily life situations in the field of education, family and society.</li> <li>• It makes students of colleges of education for pure sciences feel the value and importance of physics and the role of heat in the history of physics</li> </ul> <p>And how they deal with school students after graduation and practice their specialties as teachers in primary and middle schools</p> <p>Preparatory schools and some research laboratories in state departments in the field of research and development</p>
9. Teaching and Learning Strategies	
<b>Strategy</b>	<ul style="list-style-type: none"> <li>• A- Cognitive objectives</li> <li>• A-1 F on heat and material properties, and how crystallization arose and became a human need for applications Engineering and technology, as well as learning about its methods, fields and theories.</li> <li>• A-2 Identify the laws, their standards and conditions, the crises they face, and their benefits to society.</li> <li>• A-3 Identify the types of temperature scales</li> </ul>

	<ul style="list-style-type: none"> <li>. A-4 Identify the mechanical properties of materials</li> <li>. A-5 Identify the magnetic and electrical properties of materials</li> <li>. A-6 Identify the fourth state of matter, plasma</li> <li>B - The skill objectives of the course</li> <li>B1 - Providing the student with knowledge of heat and the properties of matter, so that it is possible for the student to transform this knowledge into behavior And act when the situation requires a specific response to solve a problem</li> <li>. B2 - Providing the student with knowledge of temperature and the factors determining it, and he can transform this knowledge into behavior that contributes to eliminating the factors determining it, and enjoying personal harmony and compatibility with the environment in which he lives.</li> </ul>
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## 10. Course Structure

Week	Hours	Required Learning	Unit or subject name	Learning method	Evaluation
		Outcomes			
1+2+3+4	4*2	<b>A lecture</b>	Measure degree the heat Types of shellfish - Thermal expansion- -Methods of heat transfer	Gain knowledge in The field of heat physics And its role in building Human civilization .in general Determine the types of heaters And the mechanics of heat transfer	General questions, discussion, and problem solving
5+6+7+8	4*2	<b>A lecture</b>	energy resources Thermal Specific heat - The first law - For thermodynamics	Gain knowledge in The field of energy sources First law of thermodynamics	General questions and discussion or exam

9+10+11 +12	4*2	<b>A lecture</b>	Real gas and Ideal gas Kinetic theory - For gases Cv - the relationship between Cp	Gain knowledge in distinguishing between ideal gas and real gas	General questions, discussion, and problem solving
13+14+15 +16	4*2	<b>A lecture</b>	Density and weight Qualitative Surface tension - Bernoulli's equation - -Viscosity		oral test
17+18+19 +20	4*2	<b>A lecture</b>	Types of stress and emotion Unique coefficient- Isotropic relationship - mechanical and temperature		General questions and problem solving
21+22+23 +24	4*2	<b>A lecture</b>	Study of properties Magnetism of materials -Classification of materials		solving equations
25+26	2*2	<b>A lecture</b>	- Connectivity electrical Conductors and insulators - And semiconductors		A monthly exam in all previous lessons
27+28	2*2	<b>A lecture</b>	Know the difference between States of matter Plasma shapes- -The importance of studying plasma		Oral exam

29+30	2*2	<b>A lecture</b>	Classification of materials Types of materials - Overlaid Advantages and disadvantages - Overlay materials	General questions, discussion, and problem solving
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<b>11. Course Evaluation</b>					
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports.....etc					
<b>12. Learning and Teaching Resources</b>					
Required textbooks (curricular books, if any)					
Main references (sources)					
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					

**main references :**

- 1- 1 Heat and properties of Materials ,by Kadem Ahmed mohemed**
- 2- The Science and Engineering of Materials, thed Donald R. Askeland – Pradeep P. Phulé . Classification of**
- 3- materials Josep Poch March.**
- 4- Heat and Thermodynamics, Mark W. Zymansky .**

## Course Description Form

1. Course Name: Electricity And Magnetism	
2. Course Code: <b>102PHEM</b>	
3. Semester / Year: 2023-2024	
4. Description Preparation Date: 28-2-2024	
5. Available Attendance Forms: Actual mandatory attendance	
6. Number of Credit Hours (Total) 90 hours / Number of Units (Total) : 7 Units	
7. Course administrator's name (mention all, if more than one name)	
Name : lecturer Dr.Haider Jameel Hassan Email : <a href="mailto:hjameel@uowasit.edu.iq">hjameel@uowasit.edu.iq</a> Name: assist.lecturer. Noor Riyadh Riyas Email: <a href="mailto:nriyas@uowasit.edu.iq">nriyas@uowasit.edu.iq</a> Name: assist.lecturer. Muna Mahmood Beden Email: <a href="mailto:muna.mahmood@uowasit.edu.iq">muna.mahmood@uowasit.edu.iq</a>	
8. Course Objectives	
Course Objectives	<ul style="list-style-type: none"> <li>• Students learn about the basics of electricity and magnetism and their importance in our lives, integrating physical meanings with mathematical laws and derivations, and opening horizons for the student towards scientific theories and their applications.</li> <li>• Make the student able to know the basics of physics</li> <li>• Make the student able to understand physical phenomena from a mathematical point of view.</li> <li>• Enable the student to obtain knowledge and understanding of the scientific laws of physics, practical applications of physical sciences, logical and scientific analysis, and interpretation of physical phenomena.</li> <li>• Teaching the student thinking skills and enabling him to understand and solve scientific problems related to the laws of physics</li> <li>• Using laboratory equipment in the electrical laboratory.</li> </ul>

## 9. Teaching and Learning Strategies

<b>Strategy</b>	<ul style="list-style-type: none"> <li>• Live interactive classroom education.</li> <li>• Using the display screen (smart board)</li> <li>• Asking intellectual questions and thought-provoking examples during recited and written lectures.</li> <li>• Practical laboratory.</li> <li>• Discussion through social networking sites and educational sites such as Telegram and Classroom.</li> </ul>
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## 10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	A lecture	<ul style="list-style-type: none"> <li>• Definitions and basic principles</li> <li>1) Material and shipment</li> <li>2) The phenomenon of electrification</li> <li>3) Atomic number</li> <li>4) Mass number</li> <li>5) Isotopes</li> <li>6) Law of conservation of charge</li> <li>• Division of materials</li> <li>A- Conductive materials</li> <li>B- Insulating materials</li> <li>T- Semiconductor materials</li> </ul>	Chapter One Coulomb's Law	General questions, discussion, and problem solving
2	3	A lecture	1.1 Coulomb's law Notes : <ul style="list-style-type: none"> <li>• To solve law problems using the vector method:</li> <li>• Vector collection</li> <li>• Vector analysis</li> <li>• Law of cosines</li> <li>• Solved examples</li> <li>• General questions about the first chapter</li> </ul>		General questions and discussion or exam
3	3	A lecture	2-1 Electric field 2-2 Electrical power lines A- Lines of electric force for a field created by an isolated point charge or a charged ball B- Electric force lines for a field created by a dipole	Chapter Two The electric Field	General questions, discussion, and problem solving



			<p>C - Lines of electric force for a field created by a charged plate</p> <p>D- Electric force lines for a field between two parallel plates</p> <p>3-2 Forms of electric field</p> <p>1- Regular electric field</p> <p>2- An irregular electric field</p> <p>4-2 Characteristics of electric field lines</p>		
<b>4</b>	<b>3</b>	<b>A lecture</b>	<p>5-2 Movement of charged particles in a uniform electric field</p> <p>1. The movement of a charged particle when it is placed at rest in a regular field</p> <p>2. The movement of a charged particle when it is thrown at a speed perpendicular to the field</p> <p>3. Calculate the electric field strength <math>E</math></p> <p>4. The electric field intensity of an isolated point charge of magnitude <math>q</math>.</p> <p>5. Find <math>(E)</math> for a number of point charges</p> <p>6. The field created by the electric dipole:</p> <ul style="list-style-type: none"> <li>• At point P located along the dipole axis</li> <li>• At the point Q located on the bisector of the dipole axis</li> </ul>		oral test
<b>5</b>	<b>3</b>	<b>A lecture</b>	<p>7. The field created by the continuous charge distribution</p> <p>8. The field created by a charge distributed in a sheet shape</p> <p>9. Some other applications</p>		General questions and problem solving
<b>6</b>	<b>3</b>	<b>A lecture</b>	Solved examples and chapter problems		solving equations

<b>7</b>	<b>3</b>	<b>A lecture</b>	3. Introduction 3.1 Electrical flux resulting from an electric field 3.2 Electric flux due to 3.3 point charge 3.4 Gaussian surface 3.5 Gauss's law	<b>Chapter Three Gauss's Law</b>	A monthly exam in all previous lessons
<b>8</b>	<b>3</b>	<b>A lecture</b>	3.6 Applications of Gauss's Law 1. The field created by a point charge 2. The field created by an infinitely long line of charges 3. The field created by a charge distributed in the form of a flat plate 4. The field created by a spherical charge 5. The electric field between two parallel conducting plates		Oral exam
<b>9</b>	<b>3</b>	<b>A lecture</b>	6. The field of a charged body when it is in electrostatic equilibrium 7. The magnitude and direction of the electric field intensity outside the conducting body at points that are small distances from its surface.		General questions, discussion, and problem solving
<b>10</b>	<b>3</b>	<b>A lecture</b>	Solved examples and chapter problems		General questions and discussion or exam
<b>11</b>	<b>3</b>	<b>A lecture</b>	4. Introduction 4.1 The potential difference between two points located in an electric field 4.2 The relationship of voltage to field strength Linear integration of the electric field intensity	<b>Chapter Four The Electric Potential</b>	General questions, discussion, and problem solving

<b>12</b>	<b>3</b>	<b>A lecture</b>	<p>4.3 Calculate the electrical voltage</p> <ol style="list-style-type: none"> <li>1. The electric potential generated by a point charge (<math>q</math>) at any point located at a distance of (<math>r</math>)</li> <li>2. If we have a set of point charges (<math>r_1, r_2, r_3 \dots r_n</math>) from the point we want to find For effort then.</li> <li>3. The voltage created by the dipole</li> </ol>		Oral Exam.
<b>13</b>	<b>3</b>	<b>A lecture</b>	<p>4.4 Electric potential arising from a connected charge distribution</p> <p>If we have a continuous distribution of charge, such as:</p> <ol style="list-style-type: none"> <li>1. The charged wire.</li> <li>2. The charged ring.</li> <li>3. Charged disk.</li> <li>4. Plane plate.</li> <li>5. The voltage generated by</li> </ol> <p>4.5 Voltage generated by a charged ring</p>		General questions and problem solving
<b>14</b>	<b>3</b>	<b>A lecture</b>	<p>4.6 The potential of a charged sphere when it is in electrostatic equilibrium</p> <p>4.7 Voltage gradient</p> <p>4.8 Equipotential surfaces</p>		Problems Solving
<b>15</b>	<b>3</b>	<b>A lecture</b>	<p>4.9 Electric Potential Energy</p> <ol style="list-style-type: none"> <li>1. The potential energy of a group of two charges <math>1q</math> and <math>2q</math>.</li> <li>2. The potential energy of a group of three charges.</li> </ol>		Oral Exam.
<b>16</b>	<b>3</b>	<b>A lecture</b>	<p>Solved examples</p> <p>Chapter Four exercises</p>		General questions, discussion, and problem solving

<b>17</b>	<b>3</b>	<b>A lecture</b>	5.1 Capacity 5.2 Types of capacitors 1. Parallel plates capacitors 2. Spherical capacitors 3. cylindrical capacitors 4. advantages of capacitors	<b>Chapter Five Capacitors &amp; Insulators</b>	General questions and discussion or exam
<b>18</b>	<b>3</b>	<b>A lecture</b>	5.3 Capacity calculation: for a capacitor with two parallel plates 5.4 Calculating the capacitance: For a cylindrical capacitance, calculate the capacitance for an isolated sphere 5.5 Connecting Capacitors 1. Connecting in parallel 2. Connecting capacitors in series		General questions, discussion, and problem solving
<b>19</b>	<b>3</b>	<b>A lecture</b>	5.6 Capacitor with two parallel plates with insulating material between them. 5.7 Electrical energy stored in capacitors. 5.8 Electric field in an insulating material. 5.9 Insulators and Gauss's Law		Oral Exam.
<b>20</b>	<b>3</b>	<b>A lecture</b>	Solved examples and answers to chapter questions		General questions and problem solving
<b>21</b>	<b>3</b>	<b>A lecture</b>	6.1 Current 6.1.1 Current density 6.2 Resistance Factors affecting the electrical resistance of a metal conductor 1. Temperature 2. Length 3. Cross-sectional area 4. Type of material 6.2.1 Types of resistors used in practice 1. Wired fixed resistance 2. Standard resistors 3. Variable resistors	<b>Chapter Six Current &amp; Resistance</b>	Problems Solving

			4. Wheatstone Bridge.		
<b>22</b>	<b>3</b>	<b>A lecture</b>	6.3 Connecting resistors 1. Straight connection 2. Connect parallelism 3. Mixed bonding 6.4 Specific resistance 6.4.1 The relationship between resistance and the specific resistance of a conductor 6.5 Ohm's law 6.5.1 Measurement of current and voltage 6.5.2 Energy transfers between an electrical circuit 6.6. Electromotive force Solve chapter questions		A monthly exam in all previous lessons
<b>23</b>	<b>3</b>	<b>A lecture</b>	7.1 Equation of a circle 7.2. Calculating the potential difference in an electrical circuit 7.3 Electrical networks with multiple circuits 7.4 Kirchhoff's law 7.4.1 Kirchhoff's first law of current 7.4.2 Kirchhoff's second law of voltage	Chapter Seven Kirchhoff's law	Oral Exam.
<b>24</b>	<b>3</b>	<b>A lecture</b>	How to use Kirchhoff's law Connecting electrical poles Connect the columns in a row Connect the columns in parallel Mixed linkage		General questions, discussion, and problem solving
<b>25</b>	<b>3</b>	<b>A lecture</b>	Solve chapter problems		

<b>26</b>	<b>3</b>	<b>A lecture</b>	<p>8.1 Introduction</p> <p>8.2 Magnetic field</p> <p>8.3 Magnetic flux</p> <p>8.4 Direction of the magnetic field</p> <p>8.5 Force on an electric charge Moving in a magnetic field</p> <p>8.6 Movement of charged particles in a magnetic field</p> <p>8.6.1 A particle carrying a positive charge (<math>q</math>) is projected with a speed (<math>v</math>) perpendicular to a uniform magnetic field (<math>B</math>). The particle will be affected by a force equal to (<math>qvB</math>).</p> <p>8.6.2 If a charged particle enters a magnetic field at an angle</p> <p>8.6.3 If the particle enters a non-uniform magnetic field</p>	<b>Chapter Eight Magnetism</b>	General questions and discussion or exam
<b>27</b>	<b>3</b>	<b>A lecture</b>	<ul style="list-style-type: none"> <li>• The movement of a charged body in two perpendicular electric and magnetic fields</li> <li>• The force on a conductor carrying an electric current in a magnetic field</li> </ul>		General questions and discussion or exam
<b>28</b>	<b>3</b>	<b>A lecture</b>	The coupling torque on a coil passing through an electric current in a magnetic field.		Oral Exam.
<b>29</b>	<b>3</b>	<b>A lecture</b>	Solved examples and solutions to chapter problems		General Equations and solve problems
<b>30</b>	<b>3</b>	<b>A lecture</b>	A comprehensive mock exam for all semesters		Problems Solving

Course structure of Experiments					
<b>1-3</b>	<b>2</b>	<b>A lecture</b>	1-General instructions about the laboratory 2- Instructions on how to write the report 3- Steps to teach graphing	introduction	quiz
<b>4-6</b>	<b>2</b>	<b>A lecture&amp; application</b>	The capacitance of Parallel plate capacitor	Exp. 1	General questions & quiz
<b>7-9</b>	<b>2</b>	<b>A lecture&amp; application</b>	Ohm law	Exp.2	Quiz& application
<b>10-12</b>	<b>2</b>	<b>A lecture&amp; application</b>	Nonlinear Load	Exp. 3	Solve questions & quiz
<b>13-15</b>	<b>2</b>	<b>A lecture&amp; application</b>	Connecting resistors in series	Exp.4	Oral exam& solve queastions
<b>16</b>	<b>2</b>	<b>A lecture</b>	Review		

<b>17</b>	<b>2</b>	<b>A lecture</b>	Exam 1		
<b>18-20</b>	<b>2</b>	<b>A lecture &amp; application</b>	Connecting resistors in parallel	Exp.5	Oral exam & solve questions
<b>21-23</b>	<b>2</b>	<b>A lecture &amp; application</b>	Connecting mixer of resistor (series and parallel)	Exp.6	solve questions
<b>24-26</b>	<b>2</b>	<b>A lecture &amp; application</b>	Wheatstone Bridge	Exp.7	Quiz
<b>27-28</b>	<b>2</b>	<b>A lecture &amp; application</b>	Study of the factors on which the resistance of a metal wire depends	Exp.8	Oral exam & application test
<b>29</b>	<b>2</b>	<b>A lecture</b>	Review		
<b>30</b>	<b>2</b>	<b>A lecture</b>	Exam2		



<b>11. Course Evaluation</b>					
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .....etc					
<b>12. Learning and Teaching Resources</b>					
Required textbooks (curricular books, if any)					
Main references (sources)					
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					

**main references :**

- 1- Electricity by Sears**
- 2- Electrical magnetism (Halliday and Resnick)**
- 3- University physics (Young freedman).**

**Electronic reference : Alfreed in Physics**

## Course Description Form

1. Course Name:	
Mathematics	
2. Course Code:	
1PHMT106	
3. Semester / Year:	
2023-2024	
4. Description Preparation Date:	
2024	
5. Available Attendance Forms:	
weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
3 hours a week / 30 week	
7. Course administrator's name (mention all, if more than one name)	
Name: Assistant Lecturer Masaar ***** FAsseeh ***** Email:	
8. Course Objectives	
<b>Course Objectives</b> Provide an explanation to the student that helps him understand functions, derivatives, integrations and the method of dealing with them and enable the student to determine the types and nature of functions and draw them on the coordinate axis	. . .
9. Teaching and Learning Strategies	
<b>Strategy</b> a. Knowledge and understanding  In-Skill Objectives c.	1. Enable the student to recognize the concept of functions. 2. Helping the student to identify and understand the types of functions 3. Enable the student to identify the drawing of functions.  B1. Training students to distinguish between derivatives B2. Enable the student to understand the method of derivation.

Teaching and learning methods	T1. Sudden daily tests. T2. Quarterly exams. T3. Giving students grades for daily participation
W. General Skills	W1. Encourage daily discussions. W2. Ask thought-provoking questions.

## 10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-8	24	The concept of a function, the domain and range of a function, the numerical function, drawing the diagrams of functions, the structure of functions, limits and their properties, some theorems about limits, continuous and non-continuous functions, some continuum theorems (without proof), examples and applications of polynomial and rational functions, inverse functions, examples and applications	Chapter One: Functions	Daily preparation	Exam and daily discussion

9-16	24	Derivation, definition, basic theorems of the process of differentiation, derivative (sum-difference-multiplication-division-combination of functions), derived from a higher order, Rolle's theorem, average value theorem, Loptal's rule, use of the concept of differentiation to obtain local maxima and minimum limits and inflection points, drawing functions, use of the concept of differentiation for speed and acceleration, intermediate functions and their derivation, examples and applications	Chapter Two: Derivation	Daily prep Aration	Exam and daily discussion
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17-22	18	Definition, relationship to tangent, approximation use, examples and applications	Chapter Three: Differentiation	Daily preparation	Exam and daily discussion
23-27	15	Indefinite integration, some theorems about indefinite integration, basic theorem of integration, properties of definite integration, examples and applications	Chapter Four: Integration	Daily preparation	Exam and daily discussion

28-30	9	Trigonometric - exponential-logarithmic functions, properties of these functions and their derivatives, inverse trigonometric functions, inverse hyperbolic functions with their applications, examples and applications	Chapter Five: Special Functions	Daily preparation	Exam and daily discussion
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<b>11. Course Evaluation</b>					
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .....etc					
<b>12. Learning and Teaching Resources</b>					
Required textbooks (curricular books if any)			المراجع: 1- حساب التفاضل والتكامل مع الهندسة التحليلية، ألفيف أي. جي. برس، الترجمة: علي عزيز علي، ج 1 و ج 2		
Main references (sources)			2-.....Calculus and analytical		
Geometry by George B. Thomas 11th Ed. 2005.					
(scientific journals, reports...)					
Electronic References, Websites					

## Course Description Form

<b>1. Course Name:</b>	
Foundations of education	
<b>2. Course Code:</b>	
PHBB 107	
<b>3. Semester / Year:2024- 2023</b>	
<b>4. Description Preparation Date:</b>	
2024/2/27	
<b>5. Available Attendance Forms:</b>	
My attendance is mandatory	
<b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>	
60    hours    2 hours	
<b>7. Course administrator's name (mention all, if more than one name)</b>	
Assistant lecturer ALAA SABAHA MOHAMMED    email :alaa.mohammed@uowasit.edu.iq	
<b>8. Course Objectives</b>	
<b>Course Objectives</b>	<p>Increasing the student's understanding of the educational and social reality throughout the ages, realizing the educational process at its utmost necessity, and understanding educational theories of various peoples, ancient and modern.</p> <p>Interpreting the educational process from a historical and philosophical point of view</p> <p>Shedding light on upbringing and education,</p> <p>Explaining the importance of the role of social educational institutions</p> <p>Helping students to train and feel the importance of the educational process,</p> <p>It is also a science that describes and explains the impact of educational systems on historical reality, past and present</p> <p>Identifying the educational reality revealed by the philosophical schools of education</p>



	<ul style="list-style-type: none"> <li>Determine the goals of community education and apply educational concepts.</li> </ul>
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## 9. Teaching and Learning Strategies

Strategy	
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## 10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
8-1	2	Chapter one	The meaning and goals of education Its theories and fields The historical basis of education Old education Chinese education Unian education Medieval education	My presence	Giving daily Assignments and checking daily attendance
16-9	2	Chapter two	Arab education before Islam and after Islam Modern education The relationship between education and society The relationship between the individual and the environment	My presence	Giving daily Assignments and checking daily attendance
22-17	2	Chapter three	Congenital education Family education National Education Health education Education and its impact on economic development	My presence	Giving daily Assignments and checking daily attendance
27-23	2	Chapter four		My presence	Giving daily Assignments and checking daily attendance

30-28	2	Chapter five	<p>Education and method in research National and social foundations Education in a social perspective Comprehensive school Systematic education</p> <p>Teaching methods Islamic education Islamic educational thought Education rights in the views of the House of Prophethood Teacher rights in Islam Ibn Khaldun</p> <p>Ibn Sina Learner rights Educational thought The social and economic basis The most important functions of the school The scientific basis of education The importance of historical research in educational fields</p>	My presence	Giving daily Assignments and checking daily attendance
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#### 11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	Foundations of education by Assistant Professor Ali Abdel Karim
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

## Course Description Form

<b>1. Course Name:</b>	
Arabic language	
<b>2. Course Code</b>	
AR 102	
<b>3. Semester / Year:</b>	
2023–2024	
<b>4. Description Preparation Date:</b>	
2024/3/ 13	
<b>5. Available Attendance Forms:</b>	
Actual mandatory attendance	
<b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>	
30 theoretical hours	
<b>7. Course administrator's name (mention all, if more than one name)</b>	
Name: Assistant Lecturer Huda Hameed Naif Email: <a href="mailto:hnaif@uowasit.edu.iq">hnaif@uowasit.edu.iq</a>	
<b>8. Course Objectives</b>	
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li><b>1– Identifying the concept of grammar, language, and literature, and the surrounding concepts within the Arabic language.</b></li> <li><b>2– Highlighting the study of the basics of the Arabic language and continuing to use it to maintain writing in a correct language free of errors.</b></li> <li><b>3– It is necessary to pay attention to the Arabic language to resist error and distortion, as well as collecting common errors and placing correct ones next to them to reduce errors in the language as much as possible.</b></li> </ul>
<b>9. Teaching and Learning Strategies</b>	
<b>Strategy</b>	Discussion and ask questions, giving the chance to students to participate by speaking, reading and translation.

10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-8	8	Grammatical axis Definition of grammar The word and its parts Definition of the noun, verb, letter and their signs The Arabized and the built Cases of construction of past tense, present tense and imperative	Grammar	Theoretical lectures ,	Examinations and daily activity
9-16	8	Constructed nouns Parsing of Al-Muthanna and its appendix. Plural of the sound masculine and the attached to it Plural of the sound feminine and the attached to it Parsing the forbidden exchange.	Grammar	Theoretical lectures	Examinations and daily activity
17-22	6	Parsing the five names Parsing the five verbs The other defective parsing is from: nouns, the incomplete noun and the incomplete noun Irregular verbs (alif, waw, and yā'). tense	It is prohibited to exchange	Theoretical lectures	Examinations and daily activity

23-27	5	<p>The Holy Qur'an, a statement of the artistic and aesthetic values in Surat Al-Kahf and Surat Maryam.</p> <p>Literary axis, the poem Ghurabaa Nazik al-Malaika.</p>	The Holy Qur'an	Theoretical lecture	Examinations and daily activity
28-30	3	<p>A poem from ancient Arabic poetry in the Abbasid era (Antar bin Shaddad)</p> <p>Badr Shaker Al-Sayyab's poem is a stranger to the Gulf, and an explanation of its artistic and aesthetic value.</p>		Theoretical lecture	Examinations and daily activity

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### 11. Course Evaluation

- The 40<sup>th</sup> annual session is divided into
- 30 marks for the semester exams (at last two test in each semester0
- 5 marks for participation, activities and homework

### 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Arabic language
Main references (sources)	abic language lessons written by a group of professors.
Recommended books and references (scientific journals, reports...)	How to learn to parse Youssef Atta Linguistic correction movement, Muhammad Dh Hammadi
Electronic References, Websites	

## Course Description Form

<b>1. Course Name:</b>	
English language	
<b>2. Course Code</b>	
1CsEI 106	
<b>3. Semester / Year:</b>	
2023–2024	
<b>4. Description Preparation Date:</b>	
20/9/2023	
<b>5. Available Attendance Forms:</b>	
Actual mandatory attendance	
<b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>	
30 theoretical hours	
<b>7. Course administrator's name (mention all, if more than one name)</b>	
Name: Assistant Lecturer Nagham Fadhil Hussein Email: nahussain@uowasit.edu.iq	
<b>8. Course Objectives</b>	
<b>Course Objectives</b>	<b>1– To enrich the students’ knowledge about English language</b>  <b>2– Improve students’ ability in listening, speaking, reading and writing</b>  <b>3– Mak the students feel with the English language in their study</b>
<b>9. Teaching and Learning Strategies</b>	
<b>Strategy</b>	Discussion and ask questions, giving the chance to students to participate by speaking, reading and translation.
<b>10. Course Structure</b>	



Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-8	1 1 1 1 1 1 1 1	<p>Acquire social manner, like introduction and greeting</p> <p>Asking about things and numbers from one up to ten</p> <p>Know his environment as some cities, the phone numbers</p> <p>Know some cities</p> <p>Reading and speaking, the numbers from 11 up 30, some new vocabulary (adjectives &amp; nouns)</p> <p>information's about his identity</p> <p>short answers, asks about jobs and some jobs, making dialog, social expression (1)</p> <p>know the basic terms about their specialist</p> <p>revision</p>	<p>Unit one: Hello</p> <p>unit 1: Hello</p> <p>Unit 2: your world</p> <p>Unit 2: your world</p> <p>Unit3: All about you</p> <p>Unit 3: All about you</p> <p>Writing a paragraph about subject deal with their specialist</p> <p>Exercises and solutions (workbook)</p>	Theoretical lectures ,	Examinations and daily activity
9-16	1 1 1 1 1 1	<p>Know how to use the possessives</p> <p>Noun + adjective, the family (mother, father....), describing friends</p> <p>Revision</p> <p>Know some nationalities and countries, the present simple</p> <p>How to use (a, an), languages, drinks, food, sports, some adjectives and verbs,</p> <p>Know how to arrange the times and preference</p> <p>Present simple (he, she, it), adverbs of frequency,</p>	<p>Unit4: family and friends</p> <p>Unit 4: Family and friends</p> <p>Exercises and solutions(workbook)</p> <p>Unit 5: The way live</p> <p>Unit 5; The way live</p> <p>Unit 6: Every day</p> <p>Unite 6: Every day</p>	Theoretical lectures	Examinations and daily activity

	1	words that go together, days of week (Sunday, Monday....), prepositions of time (in, on, at)			
	1	Revision	Exercises and solutions (workbook)		
17-22	1	How to use pronouns and the question words	Unit 7: My favorites	Theoretical lectures	Examinations and daily activity
	1	This and that, adjectives, opposite adjective (old /new), places	Unit 7: My favorites		
	1	Know house parts and furniture	Unit 8: Where I live		
	1	There is and there are, prepositions (in, on, under, next to), listening and writing, directions.	Unit 8: Where I live		
	1	Learn the past tense (was/were), irregular verbs. Saying years (1999,2000....),people and jobs (singer, politician ,artist )	Unit 9: Times past  Unit 9: Times past		
23-27	1	Know the importance of do homework and some sports	Unit 10: We had a great time	Theoretical lecture	Examinations and daily activity
	1	Revision	Exercises and solutions		
	1	Use the model verb adverb, request and off every day problem	Unit 11: I can do that		
	1	Some and any, like and would like, shopping, in a restaurant	Unit:12 Please and thank you		
	1	Learn some new terms	Write a paragraph		

28-30	1	Present continuous, present simple and present continuous, colours, opposite verbs	Unit 13: Here and now	Theoretical lecture	Examinations and daily activity
	1	Future plans, transport, pronunciation, revision (question word, tenses	Unit 14: It's times to go		
	1	Revision	Exercise and solution		

## 11. Course Evaluation

- The 40<sup>th</sup> annual session is divided into
- 30 marks for the semester exams (at last two test in each semester)
- 5 marks for participation, activities and homework

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	New Headway Pulse for Beginners, John and Liz Soars, Oxford
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

## Course Description Form

<b>1. Course Name:</b>	
Human rights and democracy	
<b>2. Course Code</b>	
HR101	
<b>3. Semester / Year:</b>	
2023–2024	
<b>4. Description Preparation Date:</b>	
25/9/2023	
<b>5. Available Attendance Forms:</b>	
Attendance is required	
<b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>	
30 Hours	
<b>7. Course administrator's name (mention all, if more than one name)</b>	
Asist-lecturer: Lara Mahmod Jabba Email: ljabbar@uowasit.edu.iq	
<b>8. Course Objectives</b>	
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>1– The student should know his rights as a human being and the rights of other people</li> <li>2– For students to become familiar with the rights established by divine laws</li> <li>3– For students to be familiar with statutory laws at all levels, international, regional and national</li> <li>4– For the student to become familiar with the public freedoms guaranteed by international constitutions.</li> <li>5– In order to learn about the freedoms recognized in heavenly laws</li> <li>6– To learn about his country's political system by learning about the democratic system</li> </ul>
<b>9. Teaching and Learning Strategies</b>	
<b>Strategy</b>	❖ Active learning:

	<p>1- Cooperative learning: Dividing students into small groups to work group projects or tasks</p> <p>2- Assigning students to realistic projects by applying what they learned from scientific lectures</p> <p>3- Problem-based learning: presenting problems to students in order to solve them using critical thinking and problem-solving skills</p> <p>❖ Use of technology:</p> <p>1- Using e-learning platforms to provide scientific lectures and interact between the student and the professor</p> <p>2- Integrating social media and computers into the educational process</p> <p>❖ Continuous evaluation</p> <p>1- Evaluate students' learning continuously and periodically to identify their strengths and weaknesses in order to address them</p> <p>2- Conducting surprise oral and written exams for the previous lecture to refine what students have learned from the academic materi</p>
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#### 10. Course structure

week	hours	Required learning outcomes	Name of the topic	Teaching method	Evaluation method
1	1	Introducing students to the concept of human rights and its principles, as well as its importance in public life	Introduction to the academic subject	Presence	General questions and discussion
2	1	Explaining the roots of human rights in Mesopotamian civilization, and explaining the most important laws enacted for this purpose	Human rights in ancient civilizations (Mesopotamian civilization)	Presence	General questions and discussion

3	1	Learn about Egyptian civilization and the most important laws that stipulate respect for humans	human rights in ancient Egyptian civilization	Presence	General questions and discussion
4	1	Considering the most important laws that spoke about man in Greek and Roman civilizations which led to class divisions in society	Human rights in the Greek and Roman civilizations	Presence	oral test
5	1	Explaining the most important beliefs of the monotheistic religions that their messengers brought in order to respect the rights of others, as stated in their heavenly books.	Human rights in the Jewish and Christian religions	Presence	General questions and discussion
6	1	The Islamic religion brought by the Noble Prophet Muhammad is considered one of the most complete divine laws that stipulate respect for others and the preservation of their rights through the injection of blood, honour, and money.	Human rights in the Islamic religion	Presence	Clarifying what was mentioned in the previous lecture and discussion

7	1	A monthly written exam	evaluation	Presence	Monthly in all previous lessons
8	1	Introducing the most important laws declared in the Universal Declaration of Human Rights, political, civil, social and economic	International human rights sources	Presence	General questions and discussion
9	1	Identifying the most important sources of the Iraqi Constitution of 2005 and the political, social, economic and cultural rights and freedoms of the Iraqi individual.	National sources for human rights	Presence	General questions and discussion
10	1	Understanding the concept of constitutional, judicial and regulatory guarantees in business management Clarifying the role played by the judiciary in respecting human rights and ensuring their rights	Constitutional and judicial human rights guarantees	Presence	General questions and discussion

11	1	Examining the religious character of Islamic law and the principle of dualism it established in society. Discussing some Islamic systems, such as the belief system, the worship system, and the moral system of the Islamic religion	Human rights guarantees in Islam	Presence	General questions and discussion
12	1	Addressing and clarifying the United Nations Charter and the demands of the General Assembly for Human Rights Understanding international social and economic human rights by establishing the Economic and Social Council	Human rights guarantees at international level	Presence	General questions and discussion
13	1	Discussing the Arab community's vision of human rights, while emphasizing the principles contained in the Universal Declaration of Human Rights. Understanding what is stated in the International Covenants on Economic, Social and Cultural Human Rights and Civil and Political Rights and their application in the Arab Charter	Project of the Arab Charter for Human Rights	Presence	General questions and discussion
14	1	Introducing the importance of the organization in promoting respect for people's rights and disseminating its culture in accordance with international standards The organization's role and work among the major Arab groups outside the Arab world	Arab Organization Human Rights	Presence	General questions and discussion



15	1	Evaluating students through a monthly exam and clarifying the scientific content of previous lectures by conducting a monthly written exam	evaluation	Presence	A monthly exam in all previous subjects
		Spring break	Spring break		Spring break
16	1	Explaining the roots of the word democracy and its principles that were developed by ancient Greek philosophers such as Plato and Socrates...etc. Discussing the idea of democracy and its development in the Middle Ages up to modern times and explaining the most important developments that were developed in order to reduce the phenomenon of tyranny in society.	The concept of democracy and its roots	Presence	General questions and discussion
17	1	Explain the types of governments or social structures that allow people to participate on an equal footing, directly or indirectly, in the political system Recognizing and empowering the popular will	Forms of democracy	Presence	General questions and discussion

18	1	<p>Clarifying the relationship between Islam and democracy in terms of giving the public the right to express opinions and for rulers to consult the ruled</p> <p>The concept of Islam's command to apply equality among members of society and achieve justice in many legal texts</p>	The concept of relationship between Islam and democracy	Presence	General questions and discussion
19	1	<p>Addressing the most important democratic foundations is the commitment to responsibility, prohibiting the system, and favoring knowledge over force and violence</p> <p>The possibility of transferring power peacefully and legitimately in Arab societies, away from military coups and violence, and ensuring the role of society in this transfer.</p>	The basic components of democracy	Presence	General questions and discussion
20	1	<p>Explaining the most important characteristics that characterize countries, such as the existence of a constitution</p> <p>Popular participation in politics</p> <p>Independence of the judiciary</p>	Characteristics of democratic state	Presence	General questions, scientific discussion, and an oral exam
21	1	<p>Discuss the importance of elections as a human idea that contributes to resolving conflicts and differences over an opinion.</p> <p>Clarifying the role of voting as an important and essential means through which an individual can influence government decisions</p>	Elections and democracy	Presence	General questions and discussion

22	1	Addressing the importance of ensuring free and fair elections by providing a democratic climate and basic freedoms for citizens. Statement of the most important findings of the United Nations General Assembly regarding periodic elections as a necessary and indispensable element in continuing efforts to protect the rights and interests of the governed.	Elections, their concept and organization	Presence	General questions and discussion
23	1	Clarifying the role of electoral districts represented by the geographical area in which elections are held Preparing lists that include the names of people who have the right to vote in each electoral district	Organizing election operations	Presence	General questions and discussion
24	1	Explaining the optimal electoral system according to which the elected person reaches the parliament to represent the various trends and trends among the people as much as possible. The role of these systems in determining election results	Direct and indirect election systems	Presence	General questions and discussion
25	1	Evaluating students through a monthly exam and clarifying the scientific content of previous lectures by conducting a monthly written exam	evaluation	Presence	A monthly exam in all previous subjects

26	1	Discussing and counting the optional vote is an obligation on the voter from a moral standpoint Also clarifying compulsory voting by imposing a penalty on voters who fail to vote without an excuse	Optional and compulsory voting system	Presence	General questions and discussion
27	1	Explaining the importance of government systems in societies and the difference between these two systems by clarifying the positives and negatives of each of these systems and in which societies they are better.	Parliamentary system and presidential system	Presence	General questions and discussion
28	1	Interpreting the media in democratic systems Explaining the importance of media performance in political participation and democratic practices	The role of the media under the democratic system	Presence	General questions and discussion
29	1	Review of scientific material in previous lectures	review	Presence	General questions and discussion of what was discussed in previous lectures
30	1	final exams	final exams		final exams

11- Course evaluation	
Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily participation, daily attendance, monthly exams, reports, etc.	
12- Learning and teaching resources	
Main references (sources)	1- Maher Saleh Allawi Al-Jubouri and others, Human Rights, Children and Democracy, Tikrit University, 2009. 2- Abdel Latif Abdel Hamid Al Ani, Democracy and Human Rights.
Recommended support books and references (scientific journals, reports....)	Law books on public freedoms
Electronic references, Internet sites	All relevant references related to the above sources

## Course Description Form

Course name	
Educational Psychology	
Course code	
Semester/Year .1	
year	
The History of preparation of this description .2	
2024/3/14	
Available attendance form .3	
Number of credit hour .4	
40 hours	units 2
The name of administrator .5	
<a href="mailto:ltaqi@uowasit.edu.iq">ltaqi@uowasit.edu.iq</a> :Laith Hilaal	
Course objectives .6	
<p>01 Providing assistance to students by describing educational objectives And educational methods appropriate for all groups.</p> <p>02 Providing students with the skills, principles, and scientific foundations that help them understand the educational problems they may face at a certain stage.</p> <p>03 Providing important information for each age stage that students go through, and understanding Their needs, thus understanding their behavior, and the ability to solve their problems In an effective way.</p> <p>04 Understanding the individual differences between students in one grade, In addition to presenting the basic principles in the evaluation process,</p> <p>05 Establishing educational and achievement tests In a way that suits their scientific abilities</p>	<p>Objectives of the study subject</p>
Teaching and learning strategies .7	
<p>Using multiple strategies that contribute to developing the learner's performance through diversification in modern teaching methods to remove the student from the state of monotony and boredom. Using the discussion strategy by exchanging opinions and ideas, as well as using the problem-solving strategy to develop innovation among the learners</p>	<p>The strategy</p>
Course structure .8	

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	Week
Discussion and questions Specific to the topic	in person	Introduction to psychology	Introduction to education psychology Objectives of psychology Psychology topics Its relationship with other sciences	Two hours	First
Daily testing	in person	behavior	Behavior and factors affecting it Research methods in psychology	Two hours	second
General discussion	in person	Attention	Attention, the meaning of attention, derivatives of attention, factors affecting attention	Two hours	third
Use examples And stories	in person	feeling	Sensation and perception: types of sensations and factors	Two hours	fourth
Common interaction	in person	perception	Types of sensations Influencing sensation and perception	Two hours	Fifth
Use stories Realism as arousal Natural	in person	Motivation	city exam Motivation in learning the importance of studying motivation the nature of motivation	Two hours	Sixth
Joint discussion	in person	Educational jobs		Two hours	Seventh
General discussion	in person	memory	Educational functions of motivation Strategy to stimulate motivation among students	Two hours	eighth

Examples	in person	Interpretation of forgetfulness	The process of remembering and forgetting. Types of remembering. Factors affecting the processes of remembering and forgetting	Two hours	Ninth
Use Provocative discussion with examples	in person	Impact of learning	Ways to improve the remembering process, explaining forgetfulness and its causes	Two hours	tenth
Brainstorming		Impact of learning	The concept of transfer of the learning effect and its types. The importance of studying the transfer of the learning effect	Two hours	eleventh
Discussion	in person	Feedback	How to benefit from the transfer of the learning process The concept of feedback and the importance of studying feedback		twelveth
Analysis with examples		Feedback applications	Types of feedback and applications of feedback		Thirteen
Analysis with examples		Thinking	Thinking, meaning of thinking, types of thinking		Fourteen
		Stimulate thought	Ways to stimulate and develop thinking		Fifteenth
Brainstorming		Learning theories	Learning theories Relational theories and their behavioral arrangement		sixteen



		Pavlov	Pavlov Skinner		seventeen
		Kohler	Kohler's theory of clairvoyance		eighteen
		Individual differences	Individual differences mean their impact on education		Nineteen
		Consider teaching	How to take it into account in teaching		twentieth
		Individual differences	Individual differences mean their impact on education		Twenty one

#### Course evaluation .9

Grade distribution: The first semester of 20 is divided into the test, daily attendance, and participation, as well as the second semester and the end of the year of 60

#### Learning and teaching resources .10

<b>Educational psychology</b>	Required textbooks (methodology, if any)
Psychological theories of guidance by Dr. Hamid Abdel Aziz Al-Faqi	Main references (sources)
Peer-reviewed scientific journals and books that address education from a behavioral point of view	Recommended supporting books and ... (scientific journals, reports )references
Electronic library and modern websites	Electronic references, Internet sites

# Course Description Form

<b>Course Name</b>	
computer	
<b>Course Code</b>	
1PHIC 108	
<b>Semester / Year</b>	
year	
<b>The history of preparation of this description</b>	
8/2/2024	
<b>Available Attendance Forms</b>	
Classrooms with laboratories	
<b>Number of credit hours (total) / number of units (total)</b>	
30	***** ***** *****
<b>The name of the course administrator (if more than one name is mentioned)</b>	
Name: hasanian Ali Thuwaib	
Email:h.thweab@uowasit.edu.iq	
<b>8. Course Objectives</b>	
<b>Course Objectives</b>	✓ Teaching computer basics
<b>9. Teaching and Learning Strategies</b>	

<b>Strategy</b>	<ul style="list-style-type: none"> <li>✓ The student's knowledge of computer basics</li> <li>✓ The student's knowledge of computer structure</li> </ul>
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## 10. Course Structure

<b>Evaluation method</b>	<b>Learning method</b>	<b>Unit or subject name</b>	<b>Required Learning Outcomes</b>	<b>Hours</b>	<b>Week</b>
Questions & Discussion	Lectures/Lab	Research Groups	Hard partitions	2	1
Questions & Discussion		Research Groups	Creating files and their types	2	2
Questions & Discussion	Lectures/Lab	Research Groups	Shortcuts in Windows	2	3
Questions & Discussion	Lectures/Lab	Research Groups	Get to know the calculator control panel	2	4
Questions & Discussion	Lectures/Lab	Research Groups	Mouse control and its forms	2	5
Questions & Discussion	Lectures/Lab	Research Groups	Wallpapers in Windows	2	6
examination	Material given	First month exam	Exam	7	
Questions & Discussion	Lectures/Lab	Research Groups	screen saver	2	8
Questions & Discussion	Lectures/Lab	Research Groups	Sort files	2	9
Questions & Discussion	Lectures/Lab	Research Groups	PAINT program	2	10
Questions & Discussion	Lectures/Lab	Research Groups	Postulates of scientific research - review of intellectual production	2	11
Questions & Discussion	Lectures/Lab	Research Groups	Trash	2	12
Questions & Discussion	Lectures/Lab	Research Groups	Network recognition in Windows	2	13
Questions & Discussion	Lectures/Lab	Research Groups	Monthly test production	2	14

	<b>examination</b>	<b>Material given</b>	<b>Second month exam</b>	<b>examination</b>	<b>15</b>	
	<b>Questions &amp; Discussion</b>	<b>Lectures/Lab</b>	<b>Research Groups</b>	<b>Comprehensive testing</b>	<b>16</b>	
	<b>Questions &amp; Discussion</b>	<b>Lectures/Lab</b>	<b>Research Groups</b>	<b>Getting to know the Office program</b>	<b>17</b>	
	<b>Questions &amp; Discussion</b>	<b>Lectures/Lab</b>	<b>Research Groups</b>	<b>Explanation of the Word interface</b>	<b>18</b>	
	<b>Questions &amp; Discussion</b>	<b>Lectures/Lab</b>	<b>Research Groups</b>	<b>Texts in Word</b>	<b>19</b>	
	<b>Questions &amp; Discussion</b>	<b>Lectures/Lab</b>	<b>Research Groups</b>	<b>Numbering in Word</b>	<b>20</b>	
	<b>Questions &amp; Discussion</b>	<b>Lectures/Lab</b>	<b>Research Groups</b>	<b>Tables in Word</b>	<b>21</b>	
	<b>Questions &amp; Discussion</b>	<b>Lectures/Lab</b>	<b>Research Groups</b>	<b>Designing tables in Word</b>	<b>22</b>	
	<b>Questions &amp; Discussion</b>	<b>Lectures/Lab</b>	<b>Research Groups</b>	<b>Explanation of PowerPoint interfaces</b>	<b>23</b>	
	<b>Questions &amp; Discussion</b>	<b>Lectures/Lab</b>	<b>Research Groups</b>	<b>Theoretical + practical test</b>	<b>24</b>	
	<b>Questions &amp; Discussion</b>	<b>Lectures/Lab</b>	<b>Research Groups</b>	<b>Identify the most important PowerPoint slides</b>	<b>25</b>	
	<b>Questions &amp; Discussion</b>	<b>Lectures/Lab</b>	<b>Research Groups</b>	<b>Recognizing the inclusion of geometric shapes</b>	<b>26</b>	
	<b>Questions &amp; Discussion</b>	<b>Lectures/Lab</b>	<b>Research Groups</b>	<b>Recognizing text insertion</b>	<b>27</b>	
	<b>Questions &amp; Discussion</b>	<b>Lectures/Lab</b>	<b>Research Groups</b>	<b>Learn about PowerPoint slideshows</b>	<b>28</b>	
	<b>Questions &amp; Discussion</b>	<b>Lectures/Lab</b>	<b>Research Groups</b>	<b>Inserting audio into PowerPoint</b>	<b>29</b>	
	<b>Questions &amp; Discussion</b>	<b>Lectures/Lab</b>	<b>Research Groups</b>	<b>Theoretical + practical test</b>	<b>30</b>	

## **11. Course Evaluation**

- **Homework and participation in daily preparation.**
- **Granting the degree to students for some questions posed in the lecture and of a cognitive nature.**
- **Monthly exams.**

## **12. Teaching and learning resources**

**Basic concepts computer**